BEFORE THE STATE OF NEW YORK PUBLIC SERVICE COMMISSION

In the Matter of

CASE 19-E-0065 and 19-G-0066

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Electric and Gas Rates May 24, 2019

Prepared Exhibit on Behalf of Consumer Power Advocates

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Final Report Willdan Energy Solutions and Luthin Associates



Buildings Outreach

2013 - 2015



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EXECUTIVE SUMMARY

The Buildings Outreach Team (Willdan Energy Solutions, Luthin Associates, Inc. and their respective sub-consultants) contracted with NYSERDA to conduct outreach to the largest Commercial Real Estate (CRE), Healthcare, Higher Education, and Large Retail customers across the State of New York to promote participation in NYSERDA's Existing Facilities Program (EFP), Flexible Technical Assistance Program (Flex Tech) and Demand Management Program (DMP). In this report, we refer this suite of programs as the "Buildings Program" or simply the "Program". The original contract period of December 19, 2012 to December 18, 2015 was extended on December 18, 2015 through January 31, 2016. The following report summarizes the activities, achievements and lessons learned over the course of this contract.

Summary of Achievements

The Buildings Outreach Team's (the Team) outreach efforts resulted in the submission of one thousand and seventy-eight (1,078) applications with estimated incentives of \$131,050,919 across all programs and estimated savings of 480,067,706 kWh and 780,788 MMBTU to the EFP and 70.5 MW demand reduction to the DMP.

Table 1.	Buildings	Outreach:	Performance	Attributable to	Outreach I	Efforts
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Program	# of Applications	Electric Savings	Gas Savings	Est. Incentives
EFP – Performance Based	537	480,067,706 kWh	780,788 MMBTU	\$79,318,742
EFP – Prescriptive	174	N/A	N/A	\$1,111,796.79
DMP	246	70.5 MW	N/A	\$50,620,380
Flex Tech	121	N/A	N/A	N/A

Please see Appendix A for links to the Salesforce reports detailing each project.

Please see Appendix B for Willdan and Luthin's Budget for both EFP and DMP

	Electricity Savings			Gas Savings		FlexTech			
	Achieved (MWh)	Goal (MWh)	Performance to Goal (%)	Achieved (MMBtu)	Goal (MMBtu)	Performance to Goal (%)	Achieved (# of CFAs)	Goal (# of CFAs)	Performance to Goal (%)
Q1 2013	12,437	34,800	36%	64,984	23300	279%	13	5	260%
Q2 2013	49,304	34,800	142%	46,404	23300	199%	20	5	400%
Q3 2013	30,466	34,800	88%	17,059	23300	73%	25	5	500%
Q4 2013	38,452	34,800	110%	965	23300	4%	5	5	100%
2013 Total	130,659	139,200	94%	129,412	93200	139%	63	20	315%
Q1 2014	39,544	52,200	76%	109,525	35000	313%	19	5	380%
Q2 2014	79,341	52,200	152%	194,758	35000	556%	7	5	140%
Q3 2014	72,778	52,200	139%	102,329	35000	292%	7	5	140%
Q4 2014	78,355	52,200	150%	66,464	35000	190%	9	5	180%
2014 Total	270,018	208,800	129%	473,076	140000	338%	42	20	210%
Q1 2015	63,259	87,000	73%	150,661	58400	258%	4	5	80%
Q2 2015	9,889	87,000	11%	18,770	58400	32%	1	5	20%
Q3 2015	5,875	87,000	7%	8,869	58400	15%	11	5	220%
Q4 2015	367	87,000	0%	-	58400	0%	-	5	0%
2015 Total	79,390	348,000	23%	178300	233600	76%	16	20	80%
Program	480,068	696,000	69%	780,788	466800	167%	121	60	202%

Table 2. Performance to Goal



Table 2 above shows the Team's performance to the kWh, MMBtu and FlexTech goals provided in our Scope of Work. As seen in the table, the Team hit their stride in 2014 and performance began exceeding goal. Progress slowed sharply in Q2 of 2015 in response to NYSERDA's request to ramp down outreach efforts earlier than anticipated, as detailed in the Program Progression section that follows.

Table 3 describes client engagement progress of Buildings Outreach over the course of the contract. Metrics include Key Account* meetings, initial outreach to new customers, program presentations given, and events attended.

	Key Metrics	2013	2014	2015	Total
	Key Account Meetings	224	475	112	811
Customore	Initial Contact	993	1559	123	2675
Customers	Initial Outreach Meeting	217	463	30	710
	Program Presentations	27	149	17	193
	Initial Contact	378	819	56	1253
Strategic Partners	Initial Outreach Meeting	62	239	48	349
	Program Presentations	27	94	19	140
Fuente	Attended	58	112	19	189
	Presented	17	28	6	51

Table 3. Key Scope of Work Metrics

*Key Account meetings tracked in Tasks 7 and 8 not displayed on this report

In addition to energy savings goals, the Team was responsible for achieving 25 Key Account meeting per quarter (300 total over three years). As seen in *Table 3* above, our team achieved a total of 811 Key Account meetings over the course of this contract – nearly tripling our contract goal.

Buildings Outreach Team

At its largest, the Buildings Outreach Team ("the Team") was comprised of 42 staff members across seven organizations working together to engage and support some of the largest commercial end users across New York State. At the outset of this contract, NYSERDA assigned key verticals to each contract lead. NYSERDA directed Willdan to engage CRE and Large Retail customers and Luthin to engage Healthcare and Higher Education customers. The following chart shows the basic organizational structure of the Team:







The Team conducted outreach out of offices across New York State to maximize our coverage area, ensure our ability to serve all of NYSERDA's customers, and reduce overall travel costs. *Figure 2* identifies the office locations of Willdan, Luthin and their respective subcontractors.



Figure 2. Buildings Outreach Team Home Office Locations



PROGRAM PROGRESSION

Over the last three years, the Team has remained an agile partner and worked to anticipate and seamlessly integrate shifting priorities, changes in regulatory requirements and other directives into our program delivery. We have adapted to changes from NYSERDA —"top down guidance"— as well as integrated customer needs —"bottom up feedback"— into our program implementation.

This section describes four of the key "top down guidance" we received from NYSERDA that served as turning points and changed the course of program implementation. *Figure 3* shows the number of applications and estimated MWh savings over the course of the program and highlights key turning points in the program progression.





The chart shows a steady program ramp up followed by a sharp uptick in applications and energy savings as we redoubled efforts on upstate outreach and promoted the DMP. Applications and energy savings turned downward sharply soon after we were directed to perform passive outreach and ramp down operations in January 2015. For the purposes of this chart, we chose to map electric savings instead of gas savings. Gas projects tended to be fewer and larger and did not serve as accurate a proxy for program progression as electric savings.

Ramp Up

Although the contract start date was December 19, 2012, work did not assemble and begin in earnest until after we finalized the contract scope and budget in the first quarter of 2013. On February 12th and 13th, 2013 the Team met with NYSERDA to develop strategies for designing effective outreach to each of the primary verticals. The Team worked with NYSERDA to identify key factors in each vertical that would lead to implementation of energy efficiency projects. These meetings also resulted in identifying barriers to implementing energy efficiency projects in each vertical. The Team used these meetings to develop and tailor outreach strategies to specific customer types.

The Team spent the first months of the program ramping up and preparing for outreach efforts. Activities in Q1 of 2013 presented many opportunities for the Team to work together. This was a learning experience and by the end of the quarter, a



standard protocol and open line of communication between Willdan, Luthin and respective subcontractors was established. NYSERDA's Key Account procedures (see Key Account section for more details) required the team to modify outreach processes in order to work within this new paradigm.

Upstate Initiative

In preparation for the second year of Buildings Outreach implementation, NYSERDA and the Team recognized that increasing outreach and achieving energy savings goals in upstate New York regions would require additional planning and resources. The Team developed an action plan to address the major outreach challenges encountered in upstate New York. This plan included a summary of upstate performance-to-date and proposed actions to accelerate NYSERDA energy program participation in the target regions. The plan was submitted in June 2014 and implemented soon after, yielding the following actions:

a. Additional Upstate Staff Resources

In 2013, 8 full time equivalents (FTEs) conducted upstate outreach. The Team increased upstate outreach staff to 15 FTEs through the following actions:

- Luthin directed its upstate sub-consultant, Taitem Engineering, to increase staff in response to the increased upstate focus. Luthin also reorganized its upstate outreach efforts by assigning specific regions and verticals to Luthin and both subcontractors.
- Willdan opened an office in Webster, NY in February of 2014 through the acquisition of Blue Springs Energy. Soon
 after the Willdan "Rochester" office opened, Willdan hired three new Outreach Contractors to focus on the West,
 Finger Lakes, Central, and Southern Tier regions.

b. Additional Customer Segments

The Team identified additional customer segments outside of the four target verticals to engage in upstate regions. The Team continued to perform the same level of active outreach to the four target verticals and used the additional staff outlined above to increase active outreach to the following customer segments:

- Government Buildings (State, County and Municipal)
- K-12 Education, Public and Private
- Hospitality (Hotel chains)
- Transportation Facilities (Airports, Bus and Train Stations)
- Correctional Facilities
- Entertainment and Public Use Facilities (Casinos, Civic Centers, Arenas, Stadiums, Museums)
- Military Bases and Facilities
- Corporate campuses and malls
- Approach for pro-active outreach to additional customer segments
- c. Targeting the Largest Energy Users

The Team targeted additional customer segment outreach to the largest energy users. The largest energy users were identified by a variety of means. For example, our Team focused additional customer segment outreach to the large Upstate cities (Albany, Syracuse, Rochester and Buffalo). Additionally, we tapped into previous knowledge of, or experience with, a particular customer or facility by a Team member or NYSERDA project manager. The Team also used existing, published benchmarking surveys (such as CBECS) that summarizes the electricity and non-electricity energy use per square foot of building type.



To formalize this approach, the Team developed a *Customer Segment Outreach Plan* for the additional customer segments. This plan was based on existing or previous relationships by a Team member; knowledge of the segments; and location of Team resources. The plan identified a Team member to lead outreach for each Regional Economic Development Council (REDC) area. The decision to structure the *Outreach Plan* along REDC regions was based on the recognition that many of the segments have existing organizational and implementation synergies (i.e., municipalities aligned with their county; K-12 district aligned with their municipality).

As seen in the graphic at the beginning of this section, implementation of the upstate outreach plan resulted in a significant increase in number of applications and resulting energy savings.

Demand Management Program

An order from the State of New York Public Service Commission (PSC) directed NYSERDA and Con Edison to prepare a contingency plan in the event that the Indian Point Energy Center ceased operation in 2016. As part of this plan, NYSERDA and Con Edison developed a program of energy efficiency and load-shaving incentives to achieve peak demand reduction of 125 MW, with 100 MW coming from demand reduction and demand response, and 25 MW coming from CHP. The Demand Management Program (DMP) provides enhanced incentives for measures that reduced summer peak electric demand, through traditional energy efficiency upgrades and more advanced solutions (e.g., battery and thermal storage, demand response enablement, and advanced building controls).

As seen in the graphic at the beginning of this section, DMP's enhanced incentives resulted in a major uptick in applications submitted to the EFP.

Summary of Achievements

The Team worked to launch DMP to market in 2014, ultimately exceeding our DMP demand reduction goal. *Table 4* summarizes the total number of applications, MW and estimated incentives the Team routed into DMP:

# of Applications	246
Estimated Incentives	\$50,620,380
Estimated Demand Reduction (MW)	70.5
Goal (MW)	40.52
Performance to Goal	174%

Table 4. DMP Buildings Outreach Team Performance

Summary of Best Practices and Lessons Learned

With the implementation of DMP, the Team learned to expand and enrich client collaboration and work with representatives from NYSERDA, Con Edison and Con Edison's outreach contractor to bring the program to market in 2014. The following represent key lessons learned and best practices gained over the course of DMP outreach:

a. Collaboration is key

NYSERDA and the Team initiated meetings with Con Edison and its outreach contractor to develop a cohesive outreach plan to take the DMP to market. To prevent duplicating outreach, the Team worked with stakeholders to review a list of the largest and highest potential customers, review specific portfolios in the four primary verticals and ultimately assign customers to a Team member.

b. Engaging past customers can help kick start new programs

NYSERDA staff generated a stalled project list, and the Team used this list to develop an outreach plan around customers with stalled EFP projects. The Team worked with NYSERDA and these customers to offer enhanced DMP incentives, if customers committed to increases in project savings, to increase traction and reengage these stagnant projects



Con Edison provided a list of customers with low load factors (large difference between average and peak demand) to identify high-potential candidates for DMP. The Team used this list to inform outreach efforts.

Since the DMP had a limited timeline, the Team relied heavily on customers with 'shovel ready' projects to kick-start the program and help identify program challenges. Our team collected and communicated customer questions, concerns and commentary to NYSERDA and Con Edison to help guide program design and understand market acceptance.

c. Smooth project transition process increases customer satisfaction

Near the beginning of 2015, NYSERDA directed the Team to transition applications from NYSERDA's pipeline to Con Edison's. Through this process, it became particularly important to present the joint efforts of Con Edison and NYSERDA as a seamlessly coordinated team to the customer. Of primary importance was demonstrating to the customer that they could continue to rely on the Team for any program questions, as well as assistance in preparing applications. The Team worked closely with Con Edison to assist customers as applications were passed along. We found that setting customer expectations up front was crucial in order to maintain the trust and confidence of customers in the DMP and NYSERDA in general.

During program transition, the Team worked with individual NYSERDA Project Managers to verify that key transfer and project data were tracked in all relevant databases and tracking resources including Salesforce.com and NYSERDA's internal project management and financial systems. In addition to working between NYSERDA and Con Edison, our team found it imperative to keep open lines of communication to the customer to manage expectations and inform their project planning decisions.

Ramp Down

On January 23, 2015, NYSERDA directed the Team to engage in reactive outreach only moving forward. As a result, our teams ramped down outreach and did not attempt to identify or develop projects from new customers or from customers with whom we were previously in contact with but had little or no outreach success. Our team only developed new applications with customers that reached out to our team directly.

As seen in the Figure 3, ramp down significantly reduced the number of projects submitted to the EFP and DMP.



ADDITIONAL PROGRAM MANAGEMENT SUPPORT

In addition to conducting outreach to generate projects for EFP, DMP and Flex Tech, Luthin and Willdan were assigned additional program management responsibilities to ensure a successful program implementation. This section summarizes the activities performed managing NYSERDA's Salesforce platform and transferring leads from hotline calls, NYSERDA Outreach email inbox and NYSERDA's website.

Salesforce

Willdan developed, implemented, and refined a data management framework using Salesforce customer relationship management (CRM) platform. The platform allows NYSERDA and their various outreach contractors track customer leads, contacts, outreach activity, application data and results throughout the entire outreach process. The platform provides deeper insights into program health and supports metrics collection and program evaluation.

Key metrics of NYSERDA's Salesforce.com Outreach "instance" include:

- 118 individual users across 11 organizations (NYSERDA and 10 Contractors)
- Tracks nearly 10,000 accounts and 21,000 individual contacts
- Eight NYSERDA programs including EFP, DMP, Flex Tech, Industrial Process and Efficiency (IPE), Data Center Efficiency Program (DCEP), New Construction Program (NCP), REV Campus Challenge, and the Combined Heat and Power (CHP) program.

Summary of Achievements

In addition to simply managing the platform, Willdan continued to research potential capabilities to enhance the Salesforce utility and its support of NYSERDA's goals. The following summarize the initiatives and modifications that Willdan enacted over the course of this contract:

a. Platform management and training

At the outset of the contract, Willdan negotiated an expanded contract with Salesforce and redesigned key structural components of the database. This entailed removing fields that were no longer beneficial, adding new fields (e.g., key accounts, post-application savings), and utilizing features like those that aid in capturing the complex relationships between customers and their multiple facilities or "sites".

Willdan delivered training modules to NYSERDA project managers, executive staff and outreach contractors to ensure the platform was used correctly and maintain data integrity. At the outset of the contract, we developed a Standard Operating Procedures (SOP) manual and protocol for data imports.

b. NYSERDA program integration

Willdan worked with NYSERDA and its other contractors to integrate NCP, DMP, CHP program, REV Campus Challenge into the instance. This entailed working with key staff from each program to set up users and develop custom fields that would enable tracking of key program data.

c. New capabilities

Willdan identified and developed best practices for new Salesforce capabilities. Our team launched Salesforce's Chatter feature to encourage further collaborative efforts between contractors and NYSERDA Project Managers. Additionally, we recently provided guidance and permission sets to allow users to send and track mass emails.

d. Reporting and Dashboards

Developed custom reports to support monthly, quarterly, annual and ad hoc reports that provide NYSERDA insight into program health.



Willdan created custom dashboards to view real-time program progress from high level including key metrics and project pipelines. *Figure 4* shows an example dashboard highlighting kWh, MMBtu and number of applications submitted by contractor:





Summary of Best Practices and Lessons Learned

The Team understands that accurate and reliable data management are essential to effective program management. Developing and maintaining Salesforce allowed NYSERDA and contractors to maximize the time spent on the most promising opportunities, and redirect efforts that are not generating the expected results. Lessons learned and best practices identified from managing NYSERDA's Salesforce platform include:

a. Data integrity is key to effective data management

It is of utmost importance that the data entered into Salesforce is up-to-date and reliable. The benefits of the Salesforce platform are only as good as the data entered into it by users. If data is not robust, the tracking and reporting tools become ineffective. To support this, data managers should check user entries to ensure that the platform is being used correctly and that the data is accurate.

b. Train users to use Salesforce as their primary project management tool

Salesforce is most effective when contractors use it to help them manage their own outreach rather than to simply log outreach intermittently. The best way to use Salesforce is to log outreach and project management activities as they occur (enter information from client calls, upload emails, etc.) and set up alerts for follow up. This allows data tracking and project management to occur simultaneously, increasing efficiency and accuracy.

c. Establish a user-friendly and intuitive structure

Contractors will only use Salesforce if the structure is intuitive and tailored to their needs. Over the course of this contract, Willdan continued to check in with NYSERDA and contractor staff to ensure that the platform was capturing the data that are important to their efforts. Thinking through the structure by limiting the number of fields and requiring entries for important fields maximizes the effectiveness of the platform.

Transferring Leads

Luthin managed the assignment of leads received via the NYSERDA Hotline, NYSERDA outreach emails and NYSERDA Solutions marketing initiative to the appropriate Team member. When a request for information or support with an application was received, Luthin would:

- Evaluate the request and establish as much information as was available and related to the project/application.
- Evaluate the Customer Sector and REDC of the account.
- Forward the request with all supporting information to the appropriate Team member for assistance.
- Track and follow up to verify that the request was responded to and assistance was provided in a timely manner.



In many cases, referrals were transferred outside of the Team and directed to a NYSERDA employee or consultant for programs not included within the Buildings Program. Examples of these referrals include: NCP, the Multifamily Performance Program (MPP), Emerging Technologies, Renewable Portfolio Standards (RPS), EnergizeNY, Small Commercial Energy Efficiency Program(s) and Green Jobs Green NY (GJGNY).

Summary of Achievements

Requests for assistance with NYSERDA applications as well as for assistance with EFP, DMP, Flex Tech and other program support averaged approximately 68 requests per month during the height of outreach activities in 2014, summarized in *Table 5* below:

Hotline Calls	460
Outreach Emails	230
NYSERDA Solutions	120
Total	810
Monthly 2014 Average	68

Table 5. 2014 Customer Triage Metrics

In 2013 due to the ramp up, and in 2015 due to the ramp down, calls, emails and Solutions leads varied significantly month-to-month.

Summary of Best Practices and Lessons Learned

Handling, assigning and follow up to marketing leads received through multiple sources is time consuming but essential. Very often requests were not just related to clarification of program offerings but were made by frustrated customers or consultants and were related to application processing, program changes and incentive delays. Lessons learned included:

a. Pre-assigned key individuals are important

Establishing the key NYSERDA support personnel to assist with issues was important to resolving the issues and clearing up any confusion that may have existed.

b. Cross-training between programs offerings is necessary

Even though the hotline and email address were advertised as being for Buildings Outreach support, many calls and emails were received for many other NYSERDA programs and initiatives. It is essential that the person handling of these requests have at least conversational knowledge of all NYSERDA programs and initiatives.



MARKET RESEARCH

The goal of market research is to further our understanding of target verticals and keep up-to-date on relevant news, technological developments, professional organizations, events, and movements in the overall efficiency market. These activities support our overall outreach efforts and are crucial to identifying potential customers. Please note that as we transitioned to "passive" outreach, the team did not focus on market research initiatives.

Highlighted market research activities included:

a. Technical Training

The Team furthered staff knowledge of commercial energy conservation measures (ECMs) and energy efficiency opportunities. Engineering staff at Willdan prepared and presented three (3) trainings to the Team. The goals of the training were threefold:

- Provide an overview of facilities systems to improve understanding;
- Identify which system components use the most energy; and,
- Give the Team additional tools and terminologies to discuss equipment, ask about relevant projects, and build relationships with facilities personnel.

Additionally, ECMs were identified for the various components (e.g., chillers, boilers, air-handling units) of the building systems discussed.

b. Vertical Market Research

During the first quarter of 2013, the Team conducted in-depth market research to gain a deeper market understanding to support and inform our direct outreach efforts. This effort included identifying and profiling major organizations in each of our market verticals as well as important energy service companies (ESCOs) and other strategic partners. This exercise resulted in documents that included information such as:

- Vertical profiles including information about prevalent decision-making structures, potential ECMs, etc.;
- Identification of major organizations within each vertical;
- Relevant information about the organization such as general size and energy spend;
- Existing and target contacts within each organization; and,
- Existing relationship with the organization, and past NYSERDA activities.

c. Ongoing Market Research

The Team conducted ongoing market research activities to inform outreach efforts including:

- Identifying and prioritizing list of new customers, stakeholders and decision makers;
- Identifying events that draw a critical mass of customers or market partners;
- Researching opportunities and general activities effecting customers such as major expansions, renovations and purchase of new facilities; and,
- Investigating political or industry-related topics potentially effecting NYSERDA outreach.



Market Research Success Story: Forest City Ratner

As part of our targeting strategy for DMP, Willdan identified key decision-makers at large property management firms that had proved difficult to engage in previous years. Near the top of this list was Forest City Ratner, a large NYC-based property management firm that had earned NYSERDA incentives several years prior, but had not been a repeat customer.

Through market research, Willdan identified and engaged the building manager at Forest City property One Metrotech in Brooklyn. Over the course of several months, our team worked with the building manager to develop an application for upcoming ECMs at the facility including variable frequency drives (VFDs) on exhausts and fan motors and lighting upgrades in the underground parking garage, lobby, and elevator machine rooms.

In total, the project is expected to reduce peak electric demand by 76.5 kW and save approximately 666,000 kWh per year, equivalent to approximately \$106,000 in avoided energy costs. The total estimated incentive, including the Demand Management Program bonuses, amounts to almost \$194,000.

Our team continued to work with Forest City Ratner and strengthened our relationship over the course of this contract to evaluate future opportunities for deeper energy saving projects.



INDIRECT OUTREACH THROUGH MARKET PARTNERS

Market Partnerships draw from a wide number of stakeholders that serve as advocates for energy efficiency and can promote NYSERDA's programs to their customers. These organizations include vendors, consultants, ESCOs, nonprofit organizations, trade associations and public agencies.

Summary of Achievements

The Team found that an energy efficiency program's ultimate success requires full engagement by local trade allies who have significant influence on, and access to, the program's target markets. Over the course of this contract, the Team identified and engaged nearly 1,000 market partners. The following outline the summary of achievements:

a. ESCOs and Other Third-Party Applicants

Our team developed an evolving ESCO strategy informed by a combination of market research, review of Buildings Portal, and interviews with NYSERDA Project Managers. We assessed and prioritized NYSERDA's existing ESCO relationships, establishing strategies for fortifying relationships with ESCOs with substantial prior knowledge of NYSERDA's programs – such as LC Associates, Wendell, and Johnson Controls. In addition, our team engaged new ESCOs and informed them of the resources provided by NYSERDA's outreach contractors that can assist them to bring in more applications.

b. Vertical-Specific Outreach Strategies

The Team developed tailored outreach strategies to suit strategic partners working in each vertical. Summary of strategies included:

- Commercial Real Estate. Willdan developed and implemented an outreach strategy tailored to market partners in the commercial real estate space. Our indirect outreach strategy includes identifying and prioritizing strategic partners working on existing facility renovations across four main categories: construction managers, design engineers, HVAC contractors and equipment vendors.
- Healthcare and Higher Education. Our team engaged several key market partners in the healthcare and higher education verticals. In addition, Luthin identified several trade and support organizations that were engaged to assist in reaching facilities and individuals in each vertical. Luthin actively participated in regular meetings of some of these organizations. The organizations included Commission on Independent Colleges and Universities (CICU); New York State Pollution Prevention Institute (NYSP2I); Capital Area American Society of Healthcare Engineers (ASHE); Central New York Society of Healthcare Engineers (CNYSHE); Greater New York Hospital Association (GNYHA); and Healthcare Association of New York State (HANYS).
- Large Retail. Willdan found that certain ESCO organizations specialized in developing retail efficiency projects and that key retail chains utilize ESCOs to roll out energy-efficient improvements nationally. We established relationships with the largest organizations including RealWinWin, Schneider Electric, and Energy Conservation & Supply and worked through these organizations to develop a large percentage of the projects submitted in the retail vertical.

c. Established Regular Meetings with Key Market Partners

The Team established regular (monthly or quarterly) check-ins with the key industry players to discuss program changes, program questions, as well as discussing current opportunities and how we can best facilitate them into the application process. A great example of this is Danfoss, a third party applicant that applied for multiple Shoprite locations. While the original scope of work was simply to add an Energy Management System to one store, Danfoss as the third-party applicant was able to aggregate multiple sites together. This new scope of work not only increased estimated energy savings from 719,956 kWh/year to over 1,300,000 kWh/year for the customer, but also enabled the market partner, Danfoss, to take advantage of the bonus incentive in DMP.



d. Market Partner Webinar Series and Presentations

Willdan hosted a four-part webinar series to educate market partners on NYSERDA's programs and the new DMP. The Willdan series of webinars were aimed at market partners that apply for and receive incentives on behalf of customers. The series covered a number of technology-specific sub-topics within each webinar – for example, one of the webinars focused on lighting solutions, and reviewed the Lighting Worksheet to discuss this measure in further detail. The Willdan webinars attracted over 115 registrants and 72 attendees from multiple sectors of the industry and was a success in achieving new incentive application and broader program uptake.

Luthin, through its sub consultant SWA, conducted regular in-person presentations targeting market partners. The SWA presentations focused on incentive programs, the application process, and the benefits NYSERDA offered through the Outreach Team. These presentations attracted 20-30 attendees at each session.

e. Collaboration with Industry Groups

Willdan and Luthin are both active members of the Building Owners and Managers Association (BOMA). In addition, Zachary Suttile and Catherine Luthin are committee members on BOMA-NY's Energy and Sustainability Committee. This committee enabled the Team to push out important updates about the NYSERDA programs and directly fostered relationships with some of the large building owners and managers. Through these memberships, the Team played an active role in planning BOMA-NY's annual Energy Action Day, which often highlighted NYSERDA programs and customer project successes. In addition to BOMA, the Team was very active in several other industry groups, including the Real Estate Board of New York (REBNY), the New York State Association of Counties (NYSAC), Urban Green Council (UGC, USGBC-NY), and New York Building Congress (NYBC).

Summary of Best Practices and Lessons Learned

Cultivating stronger relationships with key market partners in the state proved to be a vital source for bringing qualified incentive applications into NYSERDA. Since market partners such as vendors and energy consultants are active stakeholders in the energy-efficiency industry, they are able to effectively act as the "boots on the ground" for NYSERDA's programs and lead to a wider and quicker uptake in energy programs as they are released. Lessons learned and best practices developed over the course of this contract include:

- Develop relationships with key contacts at strategic partner organizations to identify projects with end users;
- Explore ways to provide incentives directly to strategic partners where possible;
- Schedule regular monthly or quarterly meetings with large or active partner organizations to review project pipelines and maintain momentum;
- Offer to support customer visits, where appropriate. Having third-party/outside expertise helps partners with sales and helps the Team develop relationships with end users and establish NYSERDA as an expert in energy efficiency;
- Presence at vertical-specific and buildings efficiency-related events allows the Team to broaden NYSERDA program awareness, forge key relationships with project stakeholders and strategic partners, and keep a finger on the pulse of the buildings efficiency market;
- Enable market partners to bundle multiple small- to mid-sized projects together into a single application. This allows
 smaller and mid-size customers to access program offerings without increasing administrative costs of developing and
 managing multiple smaller projects;
- When approaching ESCOs and other consultants who apply for and receive incentives on behalf of their utility customer clients, outreach should be more in-depth and expectations about the application and incentive process should be outlined;
- Use the customer relationships of technology specific market partners, such as lighting consultants and contractors, to leverage a single measure project into a multiple measure project;



- When speaking to vendors, contractors and consultants who pass to us their client leads, it is less important to talk about the application process and more important to show how NYSERDA incentives can benefit sales and build rapport with potential clients; and,
- When engaging a new market partner, establish right away that neither NYSERDA nor the Buildings Outreach Contractors will interfere with their client relationships.

Indirect Outreach Success Story: Danfoss - ShopRite

Near the end of 2014, the Team developed regular monthly check-ins with market partner, Danfoss, who applied for multiple Shoprite locations as a third-party applicant. While the original scope of work was simply to add an Energy Management System to one store, Danfoss as the third-party applicant was able to aggregate multiple sites together. This new scope of work not only increased estimated energy savings from 719,956 kWh/year to over 1,300,000 kWh/year for the customer, but also enabled the Market Partner, Danfoss, to take advantage of the bonus incentive program.



DIRECT CUSTOMER ENGAGEMENT

The Team identified, engaged and fostered strong working relationships with the largest end users in the CRE, healthcare, higher education and large retail verticals. In addition to establishing lasting partnerships that will serve NYSERDA in future efforts, we positioned NYSERDA as an important thought leader in energy efficiency by providing customer education and support.

We directed outreach specifically to the largest commercial end users – defined as those with \$5M+ in annual energy expenditures – with some focus placed on medium-sized customers (\$1M-\$5M in annual energy expenditures) and less focus placed on smaller customers (below \$1M in annual energy expenditures). Our interactions with clients included addressing questions and concerns of the customers and taking a full understanding of their broader energy efficiency and clean energy goals.

We also placed significant focus on customer service to ensure that first-time program participants ultimately became repeat customers. As a result, about of 54% of the applications, 59% of the kWh savings and 46% of the gas savings of the total projects submitted were from repeat customers.

Summary of Achievements

Table 6 outlines key application submission data including number of applications, estimated electricity savings and estimated MMBtu savings captured for each of the four target verticals and other segments (defined as all projects not associated with one of the four target verticals).

Vertical	# of Applications	kWh Savings	MMBtu Savings
CRE	159	152,562,227	57,516
Healthcare	102	81,253,020	237,441
Higher Education	55	53,969,791	149,650
Retail	93	101,242,281	15,994
Other Segments*	128	91,040,387	320,187
Total	537	480,067,706	780,788

Table 6. Customer Application Data Summary, By Vertical

Figure 5 below shows the percentage of the total number of applications, estimated electricity savings and estimated MMBtu savings associated with each of the four target verticals and other segments.

Figure 5. Customer Applications, By Vertical





As seen in *Figure 5*, the number of applications and kWh savings are relatively evenly distributed between verticals and gas was skewed heavily to healthcare, higher education and other verticals. Higher Education has a lower percentage of number of applications because many times multiple projects and/or multiple campus buildings were included on one application. Conversely, CRE had a larger number of applications as applications were generally submitted by building.

CRE represented a larger opportunity for electric savings and a smaller opportunity for gas savings as most CRE customers are located downstate and many of the opportunities were identified in large tenant spaces, where customers were not responsible for heating and gas upgrades. Retail was similarly skewed towards electric savings as more electric-saving opportunities exist in retail due to large lighting and refrigeration loads.

Gas is skewed heavily towards healthcare, higher education and other segments – especially K-12 schools. This is primarily due to the typical heating systems used at these types of facilities that rely heavily on natural gas fired boiler systems. In addition, since healthcare facilities must maintain comfortable temperatures 24 hours/day, efficiencies resulting from natural gas measures result in higher savings.

The majority of savings associated with other segments was hospitality, K-12 schools and government facilities – reference "Other Segment" section below for more information.

Please see the sections below for an in-depth analysis and summary of achievements for Key Accounts, the four target verticals and other segments identified over the course of the program.

Summary of Best Practices and Lessons Learned

The Team spent the majority of our time and effort engaging with NYSERDA's customers directly. Through this experience, we identified best practices that allowed our team to optimize our outreach efforts. Highlighted program innovations and success stories related to direct outreach include:

a. Cross-Promotion with Other NYSERDA Programs

At the outset of our contract, the team developed a process to cross-promote NYSERDA's other programs (e.g., NCP, CHP) to ensure that customers take advantage of the program that best suits their energy efficiency goals. To streamline this process, we integrated all of NYSERDA's program offerings into our presentation materials and trained outreach contractors on the basic requirements of all NYSERDA programs. If an opportunity for another NYSERDA program was identified, contractors followed a formalized referral protocol to ensure seamless project hand-off. The Team experienced especially positive effects between EFP, IPE-Data Centers and NCP.

b. Establish Regular Meetings with Key Accounts and NYSERDA Project Managers

The Team established regular, recurring meetings with key accounts to strengthen relationships and stay up-to-date on current projects and pipelines. By providing updates on existing NYSERDA projects alongside support with new projects, the Team is able to bring two value streams to the customers simultaneously. While such a heavy focus on customers with existing NYSERDA projects may be time consuming, the expansion of their scope into new projects has typically yielded great results in terms of larger incentive applications, making it a worthwhile endeavor.

Concurrently, the Team established streamlined coordinated meetings with the NYSERDA Project Managers with the goal of optimizing resources required to discuss specifics of current and potential projects. Having regular scheduled meetings has been instrumental for providing customers timely feedback and reliable resolutions. This work structure provides an opportunity to present necessary information to the customer in order to expedite the application process, maximize incentives, and ensure a positive customer experience.

This consistent line of communication between the customer, the Team, and NYSERDA's Project Managers has proven successful in enhancing continued customer engagement with NYSERDA's programs and providing an overall positive experience with NYSERDA's programs.



c. Pre-Qualified Projects as Gateway to Custom Projects

Helping key accounts develop applications for NYSERDA's Pre-Qualified Program (PQ) is an excellent way for more customers to establish trust in key account relationships and is often a gateway to larger, deeper retrofits in the commercial space. Our team offered to help customers with qualifying PQ projects earn incentives to pave the way for future opportunities.

d. Integrate Customer Feedback into Outreach Process

It has been crucial to gain customer feedback on the program in order to improve processes and ensure customer satisfaction with the experience of working with NYSERDA. Our team proactively collected, communicated, and integrated customer feedback into program implementation to ensure that customer feedback did not fall onto deaf ears.

e. Approaches to Statewide Projects

The Team identified several statewide project opportunities with customers rolling out ECMs concurrently in their upstate and downstate facilities. Our team found that each project site had differing needs in terms of incentive structures and timelines. In certain instances, a scope of work may aggregate across both regions but may have separate timelines; for example a client may have a lighting project that is ready to begin immediately with proposed HVAC work in the next 6-12 months. The Team worked with the client to calculate high level savings and recommends projects while adhering to the differing regional program needs.

f. Understand Non-NYSERDA Energy Program Offerings

Deepening our understanding of utility's comparable program offerings, such as National Grid's EEPS programs, presents an opportunity to keep customers informed on how NYSERDA's programs differ and how best the customer can be served. This task can be challenging in instances of aggregated projects across multiple locations (e.g., big box retail or CRE with many properties) that are served by multiple utilities. Serving in an advisory or consultative role deepens customer partnerships and has proven to spur potential project activity that would not have taken place otherwise.

g. Target Portfolio-Wide Opportunities

Targeting portfolio-wide opportunities – especially in the CRE and large retail space – increases cost effectiveness of outreach and NYSERDA project management. While these projects often require additional effort on the front end, they ultimately yield larger incentive applications and streamlined application processes.

Key Accounts

At the outset of our contract, NYSERDA directed the Team to focus outreach on the largest energy users in New York State, or Key Accounts. NYSERDA developed and distributed an initial list of Key Accounts and corresponding NYSERDA Key Account Managers based on past projects and their understanding of annual energy expenditures. Over the last three years, the list of Key Accounts evolved as we identified and established relationships with large customers. Please see Appendix C for a complete list of Key Accounts.

The goal of Key Account outreach was to build strong working relationships with the largest commercial energy users in New York and position NYSERDA and the Team in an energy advisor role so these customers continue to seek NYSERDA's offerings.

Summary of Achievements

Our Team established or strengthened relationships with the 466 Key Accounts and provided a seamless flow of information between NYSERDA Key Account Managers and customers across the state, thereby ensuring long-term collaboration. Key Accounts accounted for the majority of the kWh, peak MW and MMBtu savings associated with our project submissions.

Key Account outreach resulted in the submission of 262 applications to the EFP with estimated savings of 319,096,322 kWh and 438,369 MMBtu. *Figure 6* shows Key Account application submissions as a percentage of total application submissions.



Figure 6. Key Account Application Submissions



As seen in *Figure 6*, NYSERDA's Key Account strategy was highly successful. About half of our applications and most of our savings came from Key Accounts.

Summary of Best Practices and Lessons Learned

The Team spent the majority of our time and effort engaging with NYSERDA's customers directly. Through this experience, we identified best practices that allowed our team to optimize our outreach efforts. Highlighted program innovations and success stories related to direct outreach include:

- The Team conducted regular meetings with many key accounts over the course of the contract. These meetings served to aid in the customer's identification of new energy efficiency projects, and to discuss the status of submitted projects to ensure swift completion of all required project steps. These meetings further served to reinforce the Team's commitment to the customer to be part of their energy efficiency team and to add value.
- Provide insight into how NYSERDA's incentives can help Key Accounts utilize new technologies, and secure approval to implement specialized energy efficiency projects.
- Consistent customer follow-up is critical to developing long-standing, ongoing relationships with customers.
- Two-way communication between the Team and Key Account Managers as well as documenting interactions with Key Accounts on Salesforce was key to our success in this effort.
- Using Salesforce, we applied a data-driven approach to identifying decision makers within these major organizations and built trust through regular communication, face-to-face meetings, project support, and tracking for entire portfolios of buildings across multiple incentive programs.
- Keeping the list of Key Accounts manageable focuses outreach. In 2013, we established all "Tier 1" customers as Key Accounts, and found that expanding the list diverted our attention to the highest-priority accounts, thereby reducing our meaningful interactions with these clients.

Commercial Real Estate

The Team worked with many of the largest commercial real estate owners and managers in New York State to provide outreach, application assistance, tracking and support. We were able to bring in some of the largest incentive applications in EFP and DMP by working with key stakeholders at large CRE organizations to streamline the incentive process and make the benefits of investing in efficiency equipment easier to understand and forecast. Our CRE team became trusted advisors to a number of these firms and attended regular calls and meetings to advise on the incentive/upgrade process.



Summary of Achievements

Table 7 describes the number, kWh savings and MMBTU savings of applications submitted to EFP from the CRE vertical. *Table 8* identifies the CRE applications with the largest energy savings. As seen in the tables below and in *Figure 5* above, the CRE vertical accounted for the overall largest number of applications (24%) and kWh savings (32%), but the second smallest overall gas savings (7%).

EFP Metrics: CRE				
# of Applications	160			
kWh Savings	152,651,966			
MMBTU Savings	49,168			

Table 8. Largest CRE Applications

Customer	Project Description	kWh Savings	MMBtu Savings
Citigroup, Inc.	388 Greenwich Repositioning	19,307,744	-
JPMorgan Chase & Co.	Branch lighting	8,314,966	-
RXR Realty	601 W 26th lighting, VFD and BMS	7,268,237	1,500
Vornado Realty Trust	Portfolio-wide upgrades	6,325,121	-
Edward J. Minskoff Equities, Inc.	590 Madison VFD and BMS	4,662,999	-
Citigroup, Inc.	Branch lighting	4,196,631	-
Brookfield Property Partners	450 W 33rd HVAC & Controls	3,667,445	-
Waterman Interests	400 Park Ave chiller, DR and controls	-	30,000
Silverstein Properties Inc.	Portfolio-wide upgrades	2,455,794	8,379

About of 58% of the applications, 66% of the kWh savings and 82% of the gas savings for projects submitted under the CRE vertical were from repeat customers. *Table 9* lists the largest and/or most active repeat clients for the CRE vertical:

Table 9. Repeat CRE Customers

Customer	# of CFAs	kWh Savings	MMBtu Savings
Brookfield Property Partners	3	5,735,897	-
George Comfort & Sons Inc.	3	879,696	-
JP Morgan Chase & Co	2	9,689,881	-
Rudin Management Co.	9	10,311,820	-
RXR Realty	3	8,028,927	-
Silverstein Properties Inc.	2	2,655,794	8,579
SL Green Realty Corp.	19	3,145,230	-
Verizon Communications Inc.	3	3,813,696	-

Summary of Best Practices and Lessons Learned

Highlighted best practices and lessons learned for the CRE vertical include:

 Capital planning and processes happen once a year and connecting with clients during that time is essential to informing the ECM decision-making process. Willdan worked with clients to identify and track capital planning schedules. During these times, we provided key technical support and information (ex. ECM paybacks) to help property managers



understand the benefits of energy efficiency and provide perspective on how incentives can help them prioritize investments.

- Building operations staff generally follows contracts verbatim when managing day-to-day operations, rather than
 optimizing building operations to occupancy, weather, etc. Providing training to help staff optimize operations through
 establishing operational guidelines or installing energy management equipment would help staff ramp up and down
 HVAC systems by occupancy and weather (ex. Di-BOSS).
- In buildings with less sophisticated building engineers, upgrades are only implemented when equipment breaks, which leaves little time to plan for energy efficiency. Similarly, building staff is often allocated budget for equipment upgrades only when necessary and budget generally only covers equipment that meets code, rather than energy efficient equipment. It is important to provide tools to building engineers that help them plan for energy efficiency and persuade management to assign budget for equipment upgrades.
- Portfolio managers often test more complex or expensive ECMs (ex. advanced controls) in one property before rolling
 out to other sites. It is important to establish communication with portfolio managers early, so energy efficiency is a
 priority in test projects.
- Establishing a relationship with a champion for energy efficiency (such as a dedicated energy advisor or corporate sustainability person) at CRE firms is helpful to both identify and ensure the success of applications. We found that developing these relationships allowed our team to help gain access to other decision makers as well as ease the application development process.
- Conducting outreach to large tenants can be equally as important as conducting outreach to property managers and building owners. Many times large tenants are responsible for renovations and installing ECMs such as lighting and controls. Additionally, large tenants can provide the Team with a warm lead to the building owner or manager, in order to work with the building on base-building energy efficiency upgrades.

CRE Success Story: Brookfield

Willdan worked with Brookfield to leverage the EFP to earn incentives for their planned \$200 MM repositioning of 450 West 33rd Street. The project modernized and fully integrate the 1.8-million-square-foot office building through an exterior recladding and interior renovation program as part of its Manhattan West development in the Hudson Yards District. Our team helped the Key Account identify and quantify energy saving opportunities to reduce their utility spend while capturing available utility incentives to offset costs. Willdan worked with Brookfield technical staff to review a building wide utility analysis to refine all full-load estimates for each piece of equipment upgraded.

Healthcare

The healthcare vertical in New York State is one of the largest private employers in every region of the state. Faced with ever dwindling margins, finding ways to reduce costs in healthcare is critical to the state's economy.

The Team recognized that energy efficiency projects at healthcare facilities must compete for available capital with potentially revenue generating and/or patient care initiatives. As a result, we developed and implemented a focused outreach effort intended to address several key factors:

- There are many energy efficiency opportunities in healthcare, but not enough implementation
- Healthcare facilities operate on low margins, so not a lot of capital is available
- The key to increasing implementation is not to sell energy efficiency, but to sell how energy efficiency helps deliver the facility's core mission by increasing reliability and reducing cost



The Team also recognized that individuals responsible for energy efficiency projects at healthcare institutions vary from facility to facility and can be difficult to reach. In order to address these issues, we structured our outreach efforts as described below:

- Identify the organizational structure of each facility as early in the outreach process as possible
- For hospital systems, engage at the system level where appropriate based on system organizational structure, in addition to engaging individual facilities, and leverage individual contacts into system-wide contacts
- Third party, market partners and local utilities are very active in healthcare energy efficiency, so we needed to focus on engaging these market partners and leveraging utility customer relationships
- Show that the Team added value to both the individual and the organization.

Summary of Achievements

The following table describes the number, kWh savings and MMBTU savings of applications submitted to EFP and DMP from the Healthcare vertical.

Table 10 describes the number, kWh savings and MMBTU savings of applications submitted to EFP from the Healthcare vertical. *Table 11* identifies the Healthcare applications with the largest energy savings. As seen in the tables below and in *Figure 5* above, the Healthcare vertical fell near the middle in number of overall applications (19%) and one of the smallest in terms of kWh savings (17%). However, the Healthcare vertical accounted for the largest gas savings (31%) of the four target verticals (second largest overall).

Table 10. Healthcare EFP Metric Summary

EFP Metrics: Healthcare		
# of Applications	102	
kWh Savings	81,253,020	
MMBtu Savings	237,441	

Table 11. Largest Healthcare Applications

Customer	Project Description	kWh Savings	MMBtu Savings
Memorial Sloan Kettering CC	Plant/Design & Construction	11,372,756	-
New York Hospital Queens	Motors, Controls, Load Curtailment	6,000,000	-
NYU Langone Medical Center	OR Ventilation project	5,657,874	-
Univ. of Rochester Medical Center	Central Chiller Plant Expansion	4,500,000	-
The Mount Sinai Hospital	Free Cooling (GP Heat Exchanger)	2,500,000	-
The Mount Sinai Hospital	Guggenheim Pavilion Chiller	2,500,000	-
NSLIJ: SI University Hospital	Energy Efficient Upgrades	-	33,111
Montrose VA Medical Center	Boiler Upgrade	-	27,161
Arnot Ogden Medical Center	HVAC, controls and transformers	2,325,232	26,636
Univ. of Rochester Medical Center	Del Monte DCV	2,070,334	25,196
Long Island Jewish Medical Center	Energy Efficiency Upgrades	586,023	21,993



About of 43% of the applications, 72% of the kWh savings and 30% of the gas savings for projects submitted under the healthcare vertical were from repeat customers. *Table 12* lists the largest and/or most active repeat clients for the healthcare vertical:

Customer	# of CFAs	kWh Savings	MMBtu Savings
Memorial Sloan Kettering CC	8	13,936,443	-
New York Hospital Queens	5	8,801,155	-
New York Presbyterian Hospital	7	3,756,104	5,570
NYU Langone Medical Center	3	6,206,200	-
Mount Sinai Hospital	5	7,792,621	-
Univ. of Rochester Medical Center	6	8,628,736	42,804

Table 12. Repeat Healthcare Customers

Summary of Best Practices and Lessons Learned

While the Team was successful in generating a substantial amount of energy savings from healthcare facility projects, it was clear that the challenges we identified while developing our outreach strategy were indeed significant barriers to an even greater energy efficiency effort in healthcare. In particular, low margins resulting in an insufficient amount of capital, combined with the competition for what little capital was available, act to inhibit investment in energy efficiency projects. Finding ways to overcome this barrier was challenging. We found that focusing on the following actions provided the best chance for implementing energy efficiency projects:

- Bring economic development programs and financing programs to the attention of facilities as a means to increase implementation
- Leverage data center and/or new construction projects into facility-wide energy efficiency opportunities
- Focus on helping drive a facility's core mission through energy efficiency
- Focus on how energy efficiency projects improve resiliency
- Increase publicity and actively seek award recognition for facilities that do implement energy efficiency projects

Healthcare Success Story: Memorial Sloan Kettering Cancer Center

Memorial Sloan Kettering (MSK) is the world's oldest and largest private cancer center. MSK has made the initiative to pursue NYSERDA incentives for all electric and natural gas energy efficiency projects under the Design & Construction and Plant Operations departments. MSK's goal is to help offset the increased capital cost of more expensive, energy efficient equipment with NYSERDA incentive funding. MSK applied to NYSERDA for a project that covers five stories of the mixed-use Radiation Oncology facility at the main campus in Manhattan, NY. The project scope included a replacement of the existing process cooling chilled water plant with a new air-cooled chiller. The project also converted the existing air handling units from dual duct constant volume to single duct variable volume.

MSK's energy calculations estimated an annual savings of \$255,000 resulting from reduced consumption of 1,050,700 kWh of electricity and 1,053 MMBTU of gas. NYSERDA initially offered an incentive of \$168,000 for MSK to defray a portion of the implementation cost of \$5,200,000. After the measurement and verification process was completed, NYSERDA's Technical Consultant findings showed an increased in estimated savings and the total incentive that MSK received from NYSERDA for this project was \$196,000.



Higher Education

Higher education is in a unique position when deciding to develop energy efficiency projects. Not only do many institutions have large campuses that would benefit greatly from energy efficiency implementation, they can use their energy efficiency programs as student educational tools. However, as with healthcare and many other verticals, institutions of higher education are faced with pressures to keep tuition costs in check while their operational costs continue to increase. Combined with a limited amount of available capital, these institutions are faced with the choice of spending that capital on new facilities or new degree programs meant to increase enrollment, or on energy efficiency programs. As a result, we developed and implemented a focused outreach effort intended to address several key factors:

- Colleges and universities are very active in new construction, both ground up and major renovation, so leveraging these
 projects into energy efficiency upgrades was a focus
- There is significant community involvement with education facilities. Energy efficiency can be used to improve town/gown relationships
- There is significant student involvement in energy efficiency and sustainability on campuses
- Institutions with a heavy research program can be used to further energy efficiency
- The key to increasing implementation is not to sell energy efficiency, but to sell how energy efficiency helps deliver the institution's core mission
- Third party, market partners are active in education energy efficiency

We also identified key leverage points that could be used to increase the awareness and ultimately the implementation of energy efficiency projects. Third party organizations and affiliations were identified as providing the best leverage points. The Team became familiar with several important organizations and affiliations, including, but not limited to, BuildSmart NY; the NYC Carbon Challenge; the Association for the Advancement of Sustainability in Higher Education (AASHE); and the National Association of College and University Business Officers (NACUBO). With this understanding we could speak with higher education officials about these organizations and affiliations, and we could leverage or combine their work with these organizations and affiliations into energy efficiency projects.

Summary of Achievements

The following table describes the number, kWh savings and MMBtu savings of applications submitted to EFP and DMP from the Higher Education vertical.

Table 13 describes the number, kWh savings and MMBTU savings of applications submitted to EFP from the Higher Education vertical. *Table 12* identifies the Higher Education applications with the largest energy savings. As seen in the tables below and in *Figure 5* above, the Higher Education vertical accounted for the overall smallest number of applications (10%) and kWh savings (11%). The vertical fell near the middle in terms of overall gas savings (19%).

EFP Metrics: Higher Education		
# of Applications	55	
kWh Savings	53,969,791	
MMBTU Savings	149,650	

Table 13. Higher Education EFP Metric Summary



Customer	Project Description	kWh Savings	MMBtu Savings
SUNY: University at Buffalo	U at B - MBCx	12,000,000	-
New York University	Multi-Facility DMP	4,735,315	13,034
Clarkson University	Chiller centralization plus VFDs	3,949,240	-
Fordham University	Rose Hill and Lincoln Center upgrades	3,649,022	23,669
Nazareth College	Boiler House Project	-	48,591

Table 14. Largest Higher Education Applications

About of 53% of the applications, 38% of the kWh savings and 80% of the gas savings for projects submitted under the Higher Education vertical were from repeat customers. *Table 15* lists the largest and/or most active repeat clients for the higher education vertical:

Table 15.	Repeat Higher	Education	Customers
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Customer	# of CFAs	kWh Savings	MMBtu Savings
Fordham University	6	5,600,655	23,669
New York University	3	5,799,928	13,034
SUNY (13 schools)	15	25,957,361	23,741
University of Rochester	6	3,036,620	14,181

Summary of Best Practices and Lessons Learned

The Team successfully engaged the Higher Education vertical and helping institutions implement energy efficiency projects. However, it was clear that regardless of the size of the institution, whether it was public or private, or whether it was a 2-year or 4-year institution, they shared the same barriers to implementation of energy efficiency projects.

- Engaging multiple NYSERDA resources is important: leverage R&D group to engage the research institutions and IPE and NCP representatives for larger opportunities to maximize savings.
- Focus outreach to incubators and centers of excellence and use curricula needs for energy efficiency opportunities
- Bring economic development and financing programs to the attention of facilities to increase implementation.

Higher Education Success Story: New York University

New York University (NYU) exemplifies the benefits of a collaboration between NYSERDA, a large energy user, and the Team. NYU views NYSERDA and the Team as part of their energy efficiency team. NYU relied on the Team to help them identify energy efficiency projects; interact directly with their vendors and consultants when necessary; provide estimates of incentives and energy savings; and manage all application and follow-up documentation requirements. NYU relied on NYSERDA to offer innovative approaches and worked very closely with NYSERDA and NYSERDA's Technical Consultants (TCs) on measurement and verification activities.

NYU, NYSERDA, the Team, and NYSERDA TCs held regular meetings to discuss and track project status; initiate and complete project closeout; and plan for upcoming projects. When necessary, representatives from NCP and IPE attended meetings so that NYSERDA could manage all of NYU's projects expeditiously as possible.

As a result of this collaboration, NYU completed 3 energy efficiency projects. They participated in the FlexTech, EFP and DMP programs, and as a result, reduced their energy usage by 5,799,928 kWh and 13,034 MMBtu.



Large Retail

Over the last three years, the Team engaged the large retail market to promote NYSERDA's EFP and DMP and position the organization as a leader in energy efficiency. The retail vertical is especially diverse and includes multiple customer segments including: retail chains (e.g, big box retailers, health and personal care chains, durable and consumable goods stores, department stores, car dealerships), grocery stores, chain restaurants, and other chains. In addition to including multiple segments, the retail vertical also operates multiple ownership models including: corporate chains, independent retailers, franchises, retail cooperatives. The following outline key characteristics of the retail vertical:

- Many big box/large retail customers have dedicated energy/sustainability teams and the largest customers have staff
 responsible for identifying and collecting rebates for capital improvements;
- More so than other customer segments, large retail customers rely on ESCOs with national contracts to collect energy incentives. They often bundle these project regionally and roll out improvements across a fleet of stores.
- Reducing total operational cost; most of the electricity consumed by retail facilities is used for cooling/refrigeration, lighting, kitchens, and plug loads (cash registers, computers, etc.); most of the natural gas is used for space heating;
- Brand image and positive customer shopping experience are paramount and energy consumption is trumped by aesthetics and customer comfort (ex. product lighting and display cases).
- Competition within the market segment (i.e., one grocery chain vs. another) is a common motivator.

Summary of Achievements

Table 16 describes the number, kWh savings and MMBTU savings of applications submitted to EFP from the Large Retail vertical. *Table 17* identifies the Large Retail applications with the largest energy savings. As seen in the tables below and in *Figure 5* above, the Large Retail vertical fell near the middle in number of overall applications (17%). Large Retail accounted for the second highest kWh savings (21%), but the smallest overall gas savings (2%).

Table 16.	Large Retail	EFP Metric Sum	ımary
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EFP Metrics: Large Retail		
# of Applications	93	
kWh Savings	101,242,281	
MMBTU Savings	15,994	

Table 17.	Largest	Large	Retail	Appli	cations
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Customer	Project Description	kWh Savings	MMBtu Savings
Stop & Shop	2014 HVACR Roll Out	11,765,995	833
Whole Foods Market	ECMs – Phase 2	8,152,810	-
The Gap	2015 Distribution Center lighting	5,371,863	-
Carrols Corporation	103 location Parking Lot LED upgrade	4,400,000	-
Bluestone Energy Services	Bluestone - Stop & Shop 2015 Lighting	4,149,107	-
Sears, Roebuck & Co.	SWARM EMS 2014	3,532,908	-
Foodtown Coop	Motors, refrigeration and lighting	3,409,621	-
Best Buy	2014 Lighting Phase II	3,312,696	-
Stop & Shop	2015 HVACR Projects	2,920,120	-
Stop & Shop	LED and Controls Pilot	2,618,168	-
Wegmans Food Markets	45 locations NYS - Wegmans	2,423,920	-



About of 55% of the applications, 54% of the kWh savings and 59% of the gas savings for projects submitted under the Large Retail vertical were from repeat customers. *Table 18* lists the largest and/or most active repeat clients for the Large Retail vertical.

Customer	# of CFAs	kWh Savings	MMBtu Savings
Aldi, Inc	3	2,376,879	3,713 MMBtu
Best Buy	3	5,519,381	-
BJ's Wholesale Club	4	3,514,614	-
Stop & Shop	5	18,048,924	833 MMBtu
Walgreens	3	3,348,271	-
Whole Foods Market	2	10,118,053	-

Table 18. Repeat Large Retail Customers

Summary of Best Practices and Lessons Learned

The following outline the best practices and lessons learned the New York retail vertical:

- In the Large Retail vertical, many retailers have a simultaneous need for immediate assistance via both NCP and EFP making upgrades in some locations while expanding into new areas with new construction projects; again making a referral to the NCP team, and providing consistent follow-up and coordination.
- During many of our follow-up conversations with the retailers who attended our Retail-Sector webinar, retailers were very thankful that we walked through specific technologies that could potentially be implemented at their stores. Also, many retailers rely on facilities teams to implement energy efficiency projects, and don't have internal energy managers who are leading the charge. For these attendees in particular it was beneficial to provide them with new concepts on how to improve building efficiency through upgrading various building systems.
- National Chains have heavy reliance on PQ program. Particularly franchise customers and small to medium chains. Less
 participation in performance-based offerings is likely due to timing and relative ease of offering. Many chains rely on
 'rebate processers' who research state and regional initiatives to encourage projects in areas with lucrative
 rebates/incentives.
- Bundling projects is common, so traction early in decision-making process is critical; if project scoping starts earlier, there is a greater ability to influence size and scope before 'roll-out' begins;
- Pilots are common, to test new ECMs in a select group of stores; positive experience and press can drive deeper and more robust upgrades.
- Best practices for engaging retail contractors in clean energy include:
 - Identify customers with long operating hours and emphasis shorter payback windows (segment-specific obviously: 24-hour pharmacy vs. restaurant)
 - Link positive shopper experience to energy efficiency or broader socially-responsible image; more progressive brands vis-à-vis energy efficiency and sustainability are influenced by customer's demand to uphold sociallyresponsible and/or green reputation which can drive brand loyalty;
 - O Focus on quick-hitters like lighting, display lighting, and RTU upgrades; then try to build more robust projects;
 - Streamline multiple locations into a single application what is good for one location is likely good for another (repeatability);
 - O Grocery refrigeration and produce represent a major opportunity for energy savings



Large Retail Success Story: Stop & Shop

Stop & Shop is a chain of supermarkets with locations throughout the northeastern U.S., which has grown to become the largest supermarket operator in southern New England with over 400 stores. With an aggressive sustainability and energy reduction plan, Stop & Shop, a wholly owned subsidiary of Dutch supermarket operator Ahold, identified numerous upgrades to their HVAC and refrigeration systems spanning seven sites (both upstate and downstate) that qualified for the EFP and DMP. As a result of a positive experience with NYSERDA and the support teams during a 2014 upgrade, Stop & Shop established regular meetings with the Team to discuss upcoming projects, and even requested the same Project Manager and Technical Reviewer for their 2015 application.

Other Segments

Over the course of our contract, the Team identified additional segments that expanded beyond the target Healthcare, CRE, Higher Education, and Large Retail verticals. These segments generally fell into the following categories: Hospitality, K-12 Schools, Government, Sports and Entertainment, Correctional Facilities, Military Facilities, and Other.

Summary of Achievements

Table 19 outlines the number, kWh savings and MMBTU savings of applications submitted to EFP. *Figure 6* shows the percentage of applications, kWh savings and MMBtu savings by segment:

Segment	# of CFAs	kWh Savings	MMBtu Savings
Hospitality	36	34,922,537	3,457
K-12 Schools	25	18,032,004	113,744
Government	18	17,436,764	80,097
Sports and Entertainment	21	11,172,440	3,000
Correctional Facilities	8	3,537,815	66,898
Military	1	118,349	50,434
Other	19	5,820,478	2,557
Total	128	91,040,387	320,187

Table 19. Other Segments EFP Metrics Summary

Figure 7. Other Segment Application Submissions





As seen in *Figure* 7, Hospitality had the largest percentage of applications (28%) and kWh (38%) savings, but was one of the smallest contributors to gas savings (1%). K-12 schools were a major contributor to all three categories with the second largest number of applications (20%) and kWh savings (20%) and the largest gas savings (35%). Government contributed significantly to all three categories with 14% of total applications, 19% of total kWh savings and 25% of gas savings. The Sports and Entertainment category included customers such as theaters, art galleries, athletic complexes and other entertainment facilities and did not contribute significantly to any category except for number of applications (15%). Correctional and Military facilities did not contribute significantly to number of applications or kWh savings, but together accounted for over a third of the total gas savings. The "Other" category was not a major contributor to any category, and was mainly comprised of projects that did not fall neatly within any category such as non-profit institutions and religious facilities.

Project Success Story: NYS Department of Corrections and Community Supervision

The Team developed a relationship with the New York State Department of Corrections and Community Supervision (DOCCS) through meetings and phone calls over a one-year period. At DOCC's request, the Team also engaged with the NYS Office of General Services (OGS), who supplies design and construction management services to several hundred DOCCS projects each year. OGS had previously only used NYSERDA's pre-qualified incentives, and was not aware of how to properly utilize the performance-based track. By learning about the merits of the performance-based program, DOCCS and OGS agreed to review their current portfolio of projects for energy saving opportunities. The Team reviewed approximately 50 projects in design for 2015 and helped identify measures that would qualify for incentives – including new building management systems encompassing 63 buildings, major boiler and chiller replacements, and commercial kitchen improvements. A total of five Existing Facilities Program applications have been submitted by the team, totaling an estimated 2,880,000 kWh electricity and 64,000 MMBTU natural gas savings. The Team also served in a liaison role to enroll seven building projects into the New Construction Program. These applications involve projects at 10 correctional facilities across the state. Senior facilities management staff at DOCCS and OGS are invested in the incentive process and look forward to successfully completing the program.



PROJECT DEVELOPMENT AND IMPLEMENTATION SUPPORT

Our Team guides customers through the application process and provides continuous support, makes ourselves available after application submission, and actively follows up with customers regarding their energy efficiency goals. We gather detailed project scope information, conduct energy savings calculations, and collect other material required in the application process (e.g., recent utility bills).

After customers are engaged and projects are identified, customers or their potential consultants are guided through the Consolidated Funding Application (CFA) and eCommerce form processes. This includes gathering detailed project scope information, conducting energy savings calculations, and collecting other material required in the application process (ex. recent utility bill).

Over the course of the contract, the Team built a strong understanding of the program's strengths and weaknesses. This has enabled us to make corrections to our methods to drive participation in the program, refine our standard practices and procedures for guiding clients through each of the steps required for application submission, as well as collaborate on ways to leverage the Salesforce database for efficient reporting and program analysis.

Summary of Best Practices and Lessons Learned

The following outline the best practices and lessons learned for project development and implementation support:

a. Streamlining Communication with NYSERDA Project Managers

The Team has established regular meetings with several of NYSERDA Project Managers to streamline project development support. As there are often a number of questions and concerns that customers have regarding their projects, having regular scheduled meetings with Project Managers has been instrumental for providing customers timely feedback and reliable solutions. This work structure provides an opportunity to present necessary information to the customer in order to expedite the application process, maximize incentives, and ensure a positive customer experience.

b. Application Submission Guidance Documents

NYSERDA requires applicants to submit documentation such as utility bills and energy savings calculations along with a number of standard forms that vary depending on project size and scope (multiple facilities form, lighting form, project description document, etc.). In addition to application documentation, applicants must submit two successive online applications. Willdan and Luthin developed standard guidance documents and checklists to clarify NYSERDA's application process and ensure strict compliance with their submission requirements.

c. Customer Support from Initial Engagement through Project Close-out and Beyond

Once customers become program participants with a successfully submitted application, contact with the customer and technical consultant continues through the project implementation process to ensure customer satisfaction as well as track progress. In previous experience with NYSERDA programs, this also provides an opportunity to track expanding scopes/additional measures, as well as provides a platform to identify potential new projects. Over the course of this contract, the Team provided continuous support, made ourselves available after application submissions, and actively followed up with customers regarding their energy efficiency goals.

d. Heightened focus on Implementation Support during Ramp Down

During program ramp-down, the Team placed a higher focus on application assistance for customers that are actively pursuing NYSERDA incentives, as opposed to initiating outreach to new customers. Though this strategy would not have been advisable before program ramp down, it allowed the Team to provide better, more streamlined application support to customers that are engaged with the program. For example, shifting focus to the application process over active outreach has enabled the team to successfully work on shortening the time between initial customer contact and filing of a CFA.



e. Enhancing Outreach through Technical Support

Technical support—both for customers and strategic partners—makes outreach more meaningful. Technical expertise increases the value of even the most well executed marketing and outreach strategy as it helps customers understand what to expect from the ground-level perspective. Throughout the outreach process, the Team provided key clients with technical expertise from our on-staff engineers including project review and energy-savings calculation support. This precipitated the application process and eased the application-to-technical review hand-off for larger or more complex projects.



VERTICAL SUPPORT

As part of this contract, the Team enhanced NYSERDA customer awareness through vertical-specific marketing to promote EFP and DMP program participation, developing and/or attending in-person and web-based events, educating stakeholders, and supporting NYSERDA's initiatives and campaigns. The following section outlines specific vertical support tasks performed over the course of this contract:

Marketing

a. Support NYSERDA's Marketing Efforts

At the outset of this contract, the Team met with NYSERDA's marketing group and its contractors, Eric Mower and Associates, to discuss marketing materials needed to support program promotion. The Team provided content to support the development of marketing materials including: brochures, fact sheets, case studies and HTML email templates for each of the four target verticals. These materials were used frequently to support outreach efforts.

In addition to supporting marketing collateral development, the Team regularly promoted NYSERDA initiatives and events to our customers. This allowed NYSERDA to quickly and effectively extend the reach of marketing campaigns. For example in 2014, the team helped promote NYSERDA's BMS Stakeholders event and Energy Storage Events by creating and sending invitations to clients, reviewing promotional text and track registrations.

b. Messaging and Boilerplate Email Text

Over the course of this program, the Team developed boilerplate text and emails to support all stages of the outreach and application development process. This ensured our messaging was consistent while saving the time required for outreach staff to write each email from scratch. Outreach text was developed to be flexible enough to be tailored to different customer verticals and sent to prospective customers. Additionally, the Team developed standard email messages and checklists to clarify NYSERDA's application process with customers submitting applications and ensure compliance with submission requirements (ex. boilerplate emails requesting W-2s, utility bills and equipment specs).

c. Email Campaigns

The Team planned and executed email campaigns to send program announcements, event invitations and reminders, and general promotional materials to target customers. For example, the Team developed and sent an e-blast to promote the new DMP to key contacts. We also promote webinars such as the retail and stakeholder webinar series (see below for more details). This served as a powerful tool to keep NYSERDA at top-of-mind with customers and key stakeholders.

d. Standard Presentation

In collaboration with NYSERDA's marketing staff, the Team developed a standard presentation to promote NYSERDA during industry events, customer and strategic partner meetings, and webinars. The presentation highlighted program offerings, explained program requirements, and provided case studies of successful projects. Over the course of the contract, the Team updated the presentation regularly with supplemental slides outlining new initiatives such as the DMP and tailored the presentation to potential customers in the four target verticals as well as ESCOs, strategic partners and third-party applicants.

e. Case Studies

Starting Q1 2014, NYSERDA requested each member of the Team to one case study per quarter highlighting a successful project. The case studies were sent to NYSERDA's marketing team to be finalized as the projects moved through NYSERDA's program process and energy metrics and other details were final. Our team worked with customers to develop case study text, collect a customer quote and photo of the project and procure a photo release form for the project.

Events and Stakeholder Education

a. Event Attendance



Over the course of this contract, the Team attended 189 industry events to broaden NYSERDA program awareness, forge key relationships with project stakeholders and strategic partners, and maintain an active presence in the buildings efficiency market.

b. Event Presentations

The Team identified opportunities to present NYSERDA program offerings and educate stakeholders at 51 in-person events. The following highlights two of the events the Team planned and executed:

- EFP and Demand Response Event. In July of 2013, the Team planned and executed an outreach event at the DORMA showroom in Manhattan. The event was well attended with 117 registrants and 57 attendees, and included a good mix of architects, energy engineers and fourteen 14 customers.
- DMP Events. In 1Q2014, the Team hosted several outreach events to present the Demand Management Program, and it also organized initial outreach and follow up meetings with a wide range of partners. The team worked closely with ConEd Solutions and Viridity to hold a "St. Patrick's Day" seminar on DMP and Demand Response on March 17th. The Team also worked with Con Edison to present DMP to the BOMA Energy & Sustainability Committee on March 20th, and team members were on hand to answer questions about specific projects.

c. Online Presentations and Webinars

Our team worked with NYSERDA's marketing staff to plan and execute webinars to target specific customer and stakeholder segments. To ensure the success of these events, we developed supporting materials (invites, registration page, tailored presentations, etc.) and promoted the web-based events to the target audience. After each webinar, the Team followed up with all attendees with a personal email providing a PDF copy of the presentation and offering to answer specific questions about potential projects. The webinars resulted in a number of EFP and DMP applications and referrals to the FlexTech program.

The following highlight three of our most successful webinar series:

 ESCO Webinar Series. In the fall of 2005, the Team conducted three webinars to promote EFP to ESCOs and other third-party applicants. The events captured total of 115 registrants and 64 attendees representing a broad range of ESCOs and other strategic partners. A sample of the participating firms included: Horizon Energy Services, New Landmark Group, Noresco, Pepco Energy, Aramark, Granger, Siemens, Trane, and Thornton Thomasetti.

Please see Appendix D for the HTML invite that the Team created to promote this webinar series.

- DMP Vendor Webinar Series. In the summer of 2014, the Team conducted four webinars to promote the DMP to vendors of energy efficient technology. They included: 1) DMP Program Overview; 2) DMP for HVAC/Controls; 3) DMP for Energy Storage; and, 4) DMP for Lighting. The events captured total of 115 registrants and 72 attendees representing a broad range of vendors and other strategic partners. A sample of the participating firms included: Trane, Aramark, Noresco, Johnson Controls, Direct Energy, Danforth, Honeywell, Schneider, Siemens, Constellation, EnerNOC, Calmac Thermal Storage, Ice Energy, Green Charge Networks and Energy Management Collaborative.
- Retail Webinar Series. In the fall of 2014, the Team conducted three webinars to promote NYSERDA offerings within different "sub-vertical" within the retail sector. They included: 1) Big Box & Retail Chains; 2) Grocery Stores & Supermarkets; and, 3) Restaurants & Multi-Site Franchises. The events captured total of 46 attendees representing many retail key accounts. A sample of the participating firms included: A&P, Target, Macys, Walgreens, Hannaford, Neiman Marcus, Equinox and Aeropostale.


REV Campus Challenge

Beginning in May of 2015, NYSERDA asked Luthin to assist in the development and implementation of the REV Campus Challenge (REV CC).

The REV CC is part of Governor Andrew Cuomo's Reforming the Energy Vision (REV), a strategy to build a clean, resilient, and affordable energy system for all New Yorkers. The REV CC promotes clean energy efforts by recognizing and supporting colleges and universities in New York State that implement clean energy projects and principles on campus, in the classroom, and in surrounding communities.

REV Campus Challenge recognizes achievements among institutions of higher education and enables exchange of best practices and lessons learned. REV Campus Challenge seeks to help colleges and universities meet their financial, environmental, academic, and community goals through clean energy solutions that also help scale up total clean energy use in New York State.

Luthin provided assistance as requested by NYSERDA in developing the REV CC guidelines, participating in phone calls with members and potential members, identifying resources that REV CC members would need, and together with Willdan, developing the Salesforce database needed to support the REV CC activities.

Large Tenant Pilot Program

NYSERDA asked Willdan to provide strategic support and outreach to help bring the Large Tenant Pilot to market. On January 30, 2015, Willdan began outreach activities to CRE tenant stakeholders with the goal of recruiting tenants to participate in energy modeling pilots. Willdan leveraged exiting industry relationships to quickly identify potential candidates and conducted a direct and indirect outreach campaign that introduced the program to:

- 23 CRE owners and managers,
- 19 CRE tenants,
- 44 A&E firms with building modeling practices,
- 3 project management companies with CRE tenant practices, and
- 3 research partners.

Within two months, Willdan reached the goal of enrolling five approved pilots and two additional projects, which were waitlisted. The enrolled and waitlisted tenants included:

- White and Case moving into 1221 Avenue of the Americas, a Rockefeller Group building.
- Paul Hastings moving into 200 Park Ave, a Tishman Speyer building.
- MetLife moving into 200 Park Ave, a Tishman Speyer building.
- Rudin Management moving into 345 Park Ave, a Rudin building.
- Gensler in the process of selecting office space once enrolled.
- An anonymous Gensler client moving into a modern, highly efficient building. (Waitlisted).
- Blackrock building in Midtown. (Waitlisted).

After enrollment, Willdan also coordinated initial communications as well as kick-off meetings, site visits, and design-team introductions for the three ongoing pilots: MetLife, Paul Hastings, and White & Case. More details about this effort are included in Appendix E.



LEAN Initiative

Members of the Team participated in a Lean NY initiative to improve NYSERDA's processes. The team worked on improving the customer experience and shortening the time between an initial customer contact and the filing of a CFA. During several days of organized analysis, we identified several areas of improvement that will shorten the time by over 70% and result in better data and an overall better experience. The team is now engaged in implementation of the identified improvements. The Outreach Team members involved played an integral role in developing data checklists, data collection standards, CRM database processes, metrics tracking tools and value stream maps. The Data Collection and Triage Standard Process created by Willdan and Luthin is included as Appendix F.



LESSONS LEARNED/RECOMMENDATIONS FOR FUTURE OUTREACH

Willdan and Luthin are proud of our partnership and our service to NYSERDA. We have built working relationships 300+ Key Accounts and thousands of market partners. We have done this by focusing on developing trust with decision-makers and supporting multiple projects across entire portfolios of buildings and incentive programs. Our efforts have resulted in submission of over 1,000 applications with estimated incentives of \$130+ million and estimated savings of 480+ million kWh and 780,788 MMBTU and 70+ MW demand reduction.

Over the course of this contract, we have learned many lessons about outreach, program management and project support. Many of these lessons can be found within each section of the preceding report. The following paragraphs represent a distillation of major lessons learned and recommendations for future outreach.

Establish Regular Meetings with Key Accounts and NYSERDA Project Managers

Holding regular meetings with key stakeholders (NYSERDA PMs, outreach contractors, Key Accounts, market partners) enhances outreach and ensures an overall smooth process. Having regular scheduled meetings has been instrumental for providing customers timely feedback and reliable resolutions. This work structure provides an opportunity to present necessary information to the customer in order to expedite the application process, maximize incentives, and ensure a positive customer experience. This consistent line of communication between the customer, the Team, and NYSERDA's Project Managers has proven successful in enhancing continued customer engagement with NYSERDA's programs and providing an overall positive experience with NYSERDA's programs.

 <u>Recommendation</u>: Formalize and institutionalize (ex. incorporate as part of outreach contractors goal) scheduling regular monthly or quarterly meetings with NYSERDA PMs, outreach contractors and large or active customers or partner organizations.

Segmentation and Market Verticals

Over the course of this contract, the Team focused outreach to four NYSERDA-established market verticals: CRE, healthcare, higher education and large retail. We found that this market segmentation allowed members of our team to become experts in each vertical and understand how NYSERDA could enhance their energy efficiency goals. Please see the "Direct Outreach" section above for lessons learned within each market vertical. As noted above, market segments outside of the four original verticals accounted for a large percentage of the savings. As a result, our team successfully identified and established outreach protocol to engage these additional customer verticals.

- <u>Recommendation</u>: Identify vertical experts and industry leaders with knowledge of specific customer groups. Sell them on how you advance their mission.
- Recommendation: Consider further market segmentation especially for hospitality and K-12 schools.

Fostering Repeat Customers

Over the course of this contract, we placed significant focus on customer service to ensure that first-time program participants ultimately became repeat customers. As a result, about of 54% of the applications, 59% of the kWh savings and 46% of the gas savings of the total projects submitted were from repeat customers.

- <u>Recommendation</u>: Track and provide significant time and effort on high-potential and/or active clients and market partners.
- <u>Recommendation</u>: Develop customer service protocol and track customer satisfaction metrics through customer surveys, etc.

Coordinated and Cohesive Outreach and Messaging



Over the course of this contract, Willdan and Luthin were responsible for coordinating outreach between 42 staff members across seven organizations engaging some of the largest commercial end users across New York State. It became clear very early on that it was important to develop communication protocol to reduce customer confusion and duplication of efforts. This was particularly important for DMP. Near the beginning of 2015, NYSERDA directed the Team to transition applications from NYSERDA's pipeline to Con Edison's. Through this process, it became particularly important to present the joint efforts of Con Edison and NYSERDA as a seamlessly coordinated team to the customer. Of primary importance was demonstrating to the customer that they could continue to rely on the Team for any program questions, as well as assistance in preparing applications. We found that setting customer expectations up front was crucial in order to maintain the trust and confidence of customers in the DMP and NYSERDA in general. In addition to coordinating staff members, it was helpful to get standardize messaging from NYSERDA to ensure initiatives and directives (DMP, outreach ramp down, etc.) were accurately communicated to customers.

- <u>Recommendation</u>: Increase coordination among multiple outreach contractors to minimize the number of NYSERDA representatives calling on the same customer.
- <u>Recommendation</u>: Develop standard protocol for passing leads and projects across outreach contractors, NYSERDA PMs and other program stakeholders (ex. Con Edison for DMP).
- <u>Recommendation</u>: Develop and disseminate standard messaging to all outreach contractors and NYSERDA PMs to ensure transitions and initiatives are accurately communicated to customers and market partners.

Pre-Qualified Projects as Gateway to Custom Projects

Helping key accounts develop applications for NYSERDA's PQ program became an excellent way for more customers to establish trust in key account relationships. This became a great gateway to larger, deeper retrofits in the commercial space. Our team offered to help customers with qualifying PQ projects earn incentives to pave the way for future opportunities.

<u>Recommendation</u>: Identify ways to help customers with smaller projects to establish trust and pave the way for larger projects down the road.

Working with Market Partners

Cultivating stronger relationships with key market partners in the state proved to be a vital source for bringing qualified incentive applications into NYSERDA. Additionally, having third-party/outside expertise helps market partners with sales, helps the Team develop relationships with end users, and further establishes NYSERDA as an expert in energy efficiency. The Team found that market partners fell into two basic groups: vendors, contractors and consultants that passed us leads for their client's projects, and ESCOs and other consultants that applied for and received incentives on behalf of their clients. When working with the former, we found that is less important to talk about the application process and more important to show how NYSERDA incentives can benefit sales and build rapport with potential clients. When working with the latter, we found that it was important to provide more in-depth and establish expectations about the application and incentive process early.

- <u>Recommendation</u>: When engaging a new market partner, establish right away that neither NYSERDA nor their contractors will interfere with their client relationships.
- Recommendation: Offer to support customer visits, where appropriate.
- <u>Recommendation</u>: Explore ways to provide incentives directly to market partners, where possible. Market partners
 operating as third-party applicants are generally more motivated to provide the time and effort required to earn incentives.
- <u>Recommendation</u>: Enable market partners to bundle multiple small- to mid-sized projects together into a single application. This allows smaller and mid-size customers to access program offerings without increasing administrative costs of developing and managing multiple smaller projects.

Cross-Promotion and Cross-Training with Other NYSERDA Programs



At the outset of our contract, the team developed a process to cross-promote NYSERDA's other programs (e.g., NCP, CHP) to ensure that customers take advantage of the program that best suits their energy efficiency goals. To streamline this process, we integrated all of NYSERDA's program offerings into our presentation materials and trained outreach contractors on the basic requirements of all NYSERDA programs. If an opportunity for another NYSERDA program was identified, contractors followed a formalized referral protocol to ensure seamless project hand-off. The Team experienced especially positive effects from the overlap between EFP, IPE-Data Centers and NCP.

- <u>Recommendation</u>: Train NYSERDA and outreach staff to identify opportunities for NYSERDA programs and initiatives outside their immediate purview.
- <u>Recommendation</u>: Develop a standard protocol to hand off leads and projects between NYSERDA programs and initiatives.

Educate Staff on Other Energy Program Offerings

Deepening our understanding of utility's comparable program offerings, such as National Grid's EEPS programs, presents an opportunity to keep customers informed on how NYSERDA's programs differ and how best the customer can be served. Serving in an advisory or consultative role deepens customer partnerships and has proven to spur potential project activity that would not have taken place otherwise.

 <u>Recommendation</u>: Train NYSERDA and outreach staff on utility energy programs and other energy offerings across the state.

Incentive Structures

Over the course of this contract, the Team found that – in general - gas projects were more popular upstate and electric projects were more popular with downstate customers. This is due to several factors. For example, a large percentage of our Key Account customers upstate operate large institutions or campuses (such as hospitals or universities) with large central boiler plants, which provided more opportunity for gas projects. A large percentage of our Key Account customers downstate were most interested in electricity savings due to high electricity costs.

 <u>Recommendation</u>: Skew gas dollars to upstate and electric incentives downstate to increase overall program participation – especially in hard-to-reach upstate regions.

Data Integrity and Data Management

It is of utmost importance that the data entered into Salesforce is up-to-date and reliable. The benefits of the Salesforce platform are only as good as the data entered into it by users. If data is not robust, the tracking and reporting tools become ineffective. To support this, data managers should check user entries to ensure that the platform is being used correctly and that the data is accurate.

- Recommendation: Ensure users are using the NYSERDA data platform as their primary project management tool.
- <u>Recommendation</u>: Develop and enforce standard operating procedures that ensure data integrity.
- Recommendation: Continually adapt fields to capture key data from new initiatives and changing priorities.



APPENDIX A: APPLICATIONS SUBMITTED TO DATE

EFP: Performance-Based Applications To Date

https://na1.salesforce.com/00O30000087Fsp

EFP: Pre-Qualified Applications To Date

https://na1.salesforce.com/00O30000087Fsz

DMP Applications To Date

https://na1.salesforce.com/00O30000088Kd9

Flex Tech Applications To Date

https://na1.salesforce.com/00O30000087KKN



APPENDIX B: BUDGET

Existing Facilities Program

Willdan		Current Year 201	5	Total to Date	
Task	Budget \$	\$ Spent	% of Budget	\$ Spent	% of Budget
Task 1 - Program Management	\$1,435,013	\$376,227.14	26.22%	\$1,401,097.95	97.64%
Task 1A - CHP Outreach Salesforce Support	15,611.78	\$15,611.78	100.00%	\$15,611.78	100.00%
Task 2 - Market Research	\$415,324.00	\$41,865.12	10.08%	\$371,857.06	89.53%
Task 3 - Market Partnerships	\$757,280.00	\$156,902.35	20.72%	\$735,791.83	97.16%
Task 4 - Direct Outreach to the Largest					
Facilities with \$5M + in annual energy					
expenditures	\$1,643,267.00	\$336,244.86	20.46%	\$1,476,788.16	89.87%
Task 5 - Outreach to Customers with \$1M -					
\$5M in annual energy expenditures	\$1,170,842.00	\$190,209.21	16.25%	\$1,117,739.70	95.46%
Task 6 - Responding to Customers below					
\$1M in annual energy expenditures	\$101,009.00	\$9,239.54	9.15%	\$68,815.12	68.13%
Task 7 - Project Development Support	\$1,019,684.40	\$352,208.51	34.54%	\$1,001,043.03	98.17%
Task 8 - Project Implementation Support	\$181,763.20	\$112,302.52	61.79%	\$180,629.80	99.38%
Task 9 - Buildings Vertical Support	\$119,459.90	\$17,766.44	14.87%	\$111,346.04	93.21%
Total	\$6,859,254.28	\$1,608,577.47	23.45%	\$6,480,720.47	94.48%



LUTHIN		CURRENT QUARTER		CURRENT YEAR		TOTAL TO DATE	
Task	3 Year Budget \$	\$ Spent in Qtr. 4	% Budget	\$ Spent in Year 3	% Budget	TOTAL \$ SPENT	% Budget
Task 1 - Program Management	\$199,695.00	\$23,112.25	11.57%	\$239,596.85	119.98%	\$ 1,434,131.80	718.16%
Task 2 - Market Research	\$145,245.00	\$0.00	0.00%	\$36,363.50	25.04%	\$456,899.44	314.57%
Task 3 - Market Partnerships	\$275,830.00	\$492.00	0.18%	\$55,705.50	20.20%	\$575,027.45	208.47%
Task 4 - Direct Outreach to the Largest Facilities with \$5M + in annual energy expenditures	\$2,478,108.00	\$658.00	0.03%	\$25,334.00	1.02%	\$728,472.24	29.40%
Task 5 - Outreach to Customers with \$1M - \$5M in annual energy expenditures	\$1,718,590.00	\$0.00	0.00%	\$75,571.75	4.40%	\$900,423.89	52.39%
Task 6 - Responding to Customers below \$1M in annual energy expenditures	\$69,080.00	\$4,986.00	7.22%	\$13,855.00	20.06%	\$55,156.89	79.84%
Task 7 - Project Development Support	\$1,011,743.00	\$32,705.50	3.23%	\$358,263.20	35.41%	\$1,063,325.29	105.10%
Task 8 - Project Implementation Support	\$673,837.00	\$22,641.25	3.36%	\$159,431.00	23.66%	\$356,326.57	52.88%
Task 9 - Buildings Vertical Support	\$271,514.00	\$47,476.50	17.49%	\$131,650.00	48.49%	\$394,050.72	145.13%
TOTAL	\$6,843,642.00	\$132,071.50	1.93%	\$1,095,770.80	45.34%	\$5,963,814.28	87.14%



Demand Management Program

Willdan		Current Year 201	5	Total to Date	
Task	Budget \$	\$ Spent	% of Budget	\$ Spent	% of Budget
Task 1 - Program Management	\$266,026	\$87,412.80	32.86%	\$153,630.72	57.75%
Task 2 - Market Research	\$60,594.12	\$5,995.65	9.89%	\$32,855.73	54.22%
Task 3 - Market Partnerships	\$287,786.89	\$40,047.58	13.92%	\$219,446.89	76.25%
Task 4 - Direct Outreach to the Largest Facilities with \$5M + in annual energy		¢1.00 0.50 55	26.0204	¢(04 707 04	05.040/
expenditures	\$630,337.67	\$169,052.55	26.82%	\$604,727.84	95.94%
\$5M in annual energy expenditures	\$106,887.36	\$11,964.35	11.19%	\$92,052.93	86.12%
Task 6 - Responding to Customers below \$1M in annual energy expenditures	-	-	-	-	-
Task 7 - Project Development Support	\$245,012.40	\$68,133.46	27.81%	\$221,230.45	90.29%
Task 8 - Project Implementation Support	\$160,180.11	\$67,452.92	42.11%	\$90,501.71	56.50%
Task 9 - Buildings Vertical Support	\$53,674.41	\$2,622.00	4.89%	\$10,175.58	18.96%
Total	\$1,810,499.00	\$452,681.31	25.00%	\$1,424,621.85	78.69%



LUTHIN	LUTHIN		CURRENT QUARTER		CURRENT YEAR		TOTAL TO DATE	
Task	Budget \$	\$ Spent	% of Budget	\$ Spent	% of Budget	\$ Spent	% of Budget	
Task 1 - Program Management	\$ 71,387.50	\$5,177.50	7.25%	\$ 136,590.75	191.34%	\$ 266,497.08	373.31%	
Task 2 - Market Research	\$ 52,905.00	\$0.00	0.00%	\$11,092.00	20.97%	\$42,011.32	79.41%	
Task 3 - Market Partnerships	\$ 94,442.49	\$0.00	0.00%	\$59,561.25	63.07%	\$188,859.18	199.97%	
Task 4 - Direct Outreach to the Largest Facilities with \$5M + in annual energy expenditures	\$ 859,442.44	\$0.00	0.00%	\$29,634.00	3.45%	\$174,666.20	20.32%	
Task 5 - Outreach to Customers with \$1M - \$5M in annual energy expenditures	\$ 565,572.46	\$0.00	0.00%	\$41,631.25	7.36%	\$94,292.25	16.67%	
Task 6 - Responding to Customers below \$1M in annual energy expenditures	\$ 18,042.50	\$0.00	0.00%	\$0.00	0.00%	\$2,382.00	13.20%	
Task 7 - Project Development Support	\$ 317,349.98	\$8,830.00	2.78%	\$246,880.50	77.79%	\$374,341.00	117.96%	
Task 8 - Project Implementation Support	\$ 200,851.24	\$13,604.00	6.77%	\$185,377.75	92.30%	\$212,962.11	106.03%	
Task 9 - Buildings Vertical Support	\$ 83,131.99	\$236.00	0.28%	\$32,950.00	39.64%	\$96,511.68	116.09%	
Total	\$ 2,263,125.60	\$27,847.50	1.23%	\$743,717.50	32.86%	\$1,452,522.81	64.18%	



APPENDIX C: LIST OF KEY ACCOUNTS

Key Accounts with application submissions are indicated in blue.

Key Accounts					
ABS Partners Real Estate	CHS: Mercy Hospital of Buffalo				
Adams & Co. Real Estate	CHS: Sisters of Charity Hospital of Buffalo				
Albany Medical Center	CHS: Sisters of Charity/ St. Joseph's Campus				
Albany Medical College	Citigroup, Inc.				
Albany Molecular Research Inc. (AMRI)	City of Syracuse				
Alfred University	City University of New York				
American Council for an Energy-Efficient Economy	Clarkson University				
American Eagle	Cohen Brothers Realty Corp.				
American Express	College of Nanoscale Science & Engineering (CNSE)				
American International Group	Colliers International				
Amtrak	Columbia University				
Archdiocese of New York	Columbia University Medical Center				
Ashkenazy Acquisition Corp	Commerzbank				
AT&T	Cornell NYS Agriculture Experimental Station				
AXA Equitable	Cornell University				
Bank of America Corp	Corning, Inc Canton				
Barclays Capital Inc.	Corning, Inc Diesel Manufacturing Facility				
Bard College	Costco				
Barnard College	Credit Agricole				
Bates Troy. Inc.	Credit Suisse				
Beacon Capital Partners	Crouse Hospital				
Berry Plastics Corp - Macedon	CUNY: Bronx Community College				
Best Buy	CUNY: City College of New York				
Beth Israel Comprehensive Cancer Center - West Division	Cushman & Wakefield Inc				
Big Lots	CVS Pharmacies				
BlackRock	Daemen College				
Bloomberg L.P	Dannon Co. Inc				
Bon Secours Charity Health System	Deloitte				
Bon Secours: Good Samaritan	Delta Engineers				
Boston Properties Inc	Denihan Hospitality Group				
Brack Capital Real Estate	Deutsche Bank				
Bristol-Myers Squibb Company USA	Dewey & LeBoeuf LLP				
Bronx-Lebanon Hospital Center	Diamond Property Group				
	DOCCS: New York State Department of Corrections and				
Brookdale University Hospital and Medical Center	Community Supervision				
Brookfield Property Partners	Dormitory Authority State of New York				
Brooklyn Bureau of Community Services	Durst Organization				
Brooklyn Hospital Center	Eastman Kodak				
Brooklyn Navy Yard	ECMC: Erie County Medical Center				
Building Owners and Managers Association	Ellis Medicine: Ellis Hospital				
Burke Rehabilitation Hospital	Empire City Casino - Yonkers Raceway				
Burrows Paner - Little Falls	Empire State Realty Trust				
Canaioharie CSD	Equity Office				
Cassidy Turley New York	Frie County				
Caused Medical Center at Ithaca	Ernst & Young				
CBRE Group Inc	Evergreen Commons Nursing Home				
CBS Corporation	Excelsion Packaging Group Inc				
Champlain Valley Physicians Hospital Medical Contar	Eaversion 1 dekaging Oroup, inc.				
CHS: Catholic Health System of Buffalo	First Niagara Financial Group				
CHS: Kanmara Maray Haspital	Fisher Drothers Management Co				
Uno. Reliniore werey nospital	risher brothers Management Co.				



Key Accounts						
Fluor Enterprises	Kaleida: Millard Fillmore Surgery Center					
Fordham University	Kaleida: Women and Children's Hospital					
Forest City Ratner	Kaufman Organization					
Fulton City School District	Kimpton Hotels and Restaurants Group LLC					
General Services Administration	Kingsbrook Jewish Medical Center					
Genting New York, LLC	KPMG					
George Comfort & Sons Inc.	Kushner Companies					
Glens Falls Hospital	L&L Holding Co.					
Goldman Sachs Group Inc.	Lawrence Hospital Center					
Good Samaritan Regional Medical Center	LC Associates					
Google	Loews Corporation					
Graymont Materials- Plattsburgh	Louis Calder Center					
Greater Hudson Valley Healthcare: Orange Regional Medical						
Center	Lowes					
Greek Mountain Dairy	Lydall					
Guardian Life Insurance	M&T Bank					
GUSC Energy Inc.	Macerich Co.					
GW Lisk Company	Mack-Cali Realty Corporation					
Hamilton College	Macy's					
Hampshire Hotels & Resort	Maimonides Medical Center					
Hannaford Bros	Manhattan College					
Health Quest Vassar Brothers Medical Center	Manhattanville College					
Hersha Hospitality Trust	MARITIME COLLEGE STATE UNIV OF NY					
Hilbert College	Marriott					
Hilton Worldwide	Mastercard					
Hines	McGraw-Hill Companies					
Hobart & William Smith Colleges	Medaille College					
Home Depot	Medisys Health Network					
Hospital Engineering Society of Greater New York, Inc.	Memorial Sloan Kettering Cancer Center					
Host Hotels and Resorts	Mercy College					
Hotel Carter	MetLife					
HSBC	Michaels					
Huron Real Estate	MidHudson Regional Hospital					
IBM Inc.	Millennium Hotels and Resorts					
IBM Watson Research Center	Mitsui Fudosan Co., Ltd.					
IBM-Poughkeepsie	Montefiore Medical Center					
Icahn School of Medicine at Mount Sinai	Montefiore Mount Vernon					
InterContinental Hotel Group	Montefiore New Rochelle					
Iona College	Montefiore Westchester Square					
Ithaca College	Morgan Stanley					
Jack Resnick & Sons Inc.	Mount Peter Skiing and Snowboarding					
Jamestown Properties	Mount Sinai Beth Israel Brooklyn					
IC Penney	Mount Sinai Beth Israel Manhattan					
	Mount Sinai Health System					
IPMorgan Chase & Co	Mount Sinai Oueens					
Kaleida Health	Mount Sinai Roosevelt					
Kaleida: Buffalo General Medical Center	Mount Singi St. Luke's					
Kaleida: DeGraff Memorial Hospital	Murray Hill Properties					
Kaleida: Dooran Monionai Hospital	Museum of Modern Art					
Kalaida: Millard Fillmora Suburban Haanital	Natural Resources Defense Council					
Kalenda, Ivimaru Emmore Suburban nospital	matural Resources Defense Couffell					



Key Accounts					
NBC Universal Inc.	NYS OMH: Buffalo Psychiatric Center				
NE Health: Albany Memorial Hospital	NYS OMH: Elmira Psychiatric Center				
NE Health: Samaritan Hospital	NYS OMH: Greater Binghamton Health Center				
NE Health: St. Peter's Hospital	NYS OMH: Hutchings Psychiatric Center				
NE Health: Sunnyview Rehabilitation Hospital	NYS OMH: Kingsboro Center				
Nestle Purina PetCare - Dunkirk	NYS OMH: Mid Hudson Forensic Psychiatric Center				
New Victory Theater	NYS OMH: Mid Hudson Forensic Psychiatric Center(dup)				
New Water Street Corporation	NYS OMH: Mid Hudson Medical Group				
New York Botanical Gardens	NYS OMH: Mohawk Valley Psychiatric Center				
New York City Department of Citywide Administrative					
Services	NYS OMH: Rochester Psychiatric Center				
New York City Department of Environmental Protection	NYS OMH: Rockland Psychiatric Center				
New York City Housing Authority	NYS OMH: St Lawrence Psychiatric Center				
New York College of Podiatric Medicine	NYS OMH: Western New York Children's Psychiatric Center				
New York Eye and Ear Infirmary of Mount Sinai	NYSE Euronext, Inc.				
New York Hospital Queens	NYU Hospital for Joint Diseases				
New York Life Insurance	NYU Langone Medical Center				
New York Methodist Hospital	NYU Langone-Cobble Hill				
New York Power Authority	One City Block (111 8th Avenue)				
New York Times - College Point	Our Lady of Lourdes Memorial Hospital				
New York University	Pace University				
Newmark Grubb Knight Frank	Paramount Group Inc.				
News Corporation	PepsiCo, Inc.				
NFL Properties	Pepsi-Cola Bottling Co. Of New York, Inc.				
Niagara Falls Memorial Medical Center	Pfizer Inc				
Nomura Securities International, Inc	Phelps Memorial Hospital Center				
North Shore Long Island Jewish Health System	Philip Morris International				
Northern Westchester Hospital	Philips Optimum Lighting				
NSLIJ: Forest Hills Hospital	Picotte Companies				
NSLIJ: Lenox Hill HealthPlex	Polytechnic Institute of NYU				
NSLIJ: Lenox Hill Hospital	Pratt Institute				
NSLIJ: Long Island Jewish Medical Center	Preferred Hotel Group				
NSLIJ: North Shore University Hospital at Manhasset	Price Chopper				
NSLIJ: St Vincents Medical Center	Price Waterhouse Coopers (PwC)				
NSLIJ: Staten Island University Hospital - North	Prologis Inc				
NSLIJ: Staten Island University Hospital - South	Pyramid Management Group				
Nyack Hospital	Quad Graphics, Inc.				
NYC Department of Design and Construction	RBS Citizens				
NYC Economic Development Corporation	Reckson - A Division of SL Green				
NYC HHC: Elmhurst Hospital Center	Regeneron Pharmaceuticals Inc				
NYPH: Columbia University Medical Center	REIT Management & Research				
NYPH: Morgan Stanley Children's Hospital	Rensselaer Polytechnic Institute				
NYPH: New York Downtown Hospital	Retail Properties of America, Inc.				
NYPH: New York-Presbyterian Hospital	RFR Realty				
NYPH: New York-Presbyterian Westchester Division	Rite Aid				
NYPH: NewYork-Presbyterian Healthcare System	River Park Residences				
NYPH: The Allen Hospital	Rochester City School District				
NYPH: Weill Cornell Medical Center	Rochester Institute of Technology				
NYPH: White Plains Psychiatric	Rockefeller Group				
NYS Office of Mental Health	Rockefeller University				



Key Accounts					
Roswell Park Cancer Institute	SUNY: College of Environmental Science & Forestry				
RRHS: Rochester General Hospital	SUNY: College of Optometry				
Rudin Management Co.	SUNY: Columbia-Greene Community College				
RXR Realty	SUNY: Corning Community College				
Saint John Fisher College	SUNY: Cortland				
Saint Peter's Health Partners	SUNY: Delhi				
Saks & Company	SUNY: Downstate Medical Center				
Samaritan Medical Center	SUNY: Dutchess County Community College				
Sarah Lawrence College	SUNY: Empire State College				
Saratoga Hospital	SUNY: Erie Community College				
Sea Breeze Synagogue - Brooklyn	SUNY: Facilities				
Sears, Roebuck & Co.	SUNY: Finger Lakes Community College				
Serrano Construction Group	SUNY: Fredonia				
Seton Health: St Mary's (dup)	SUNY: Fulton-Montgomery Community College				
Seton Health: St Mary's Hospital	SUNY: Genesee Community College				
Silverstein Properties Inc.	SUNY: Geneseo				
Skidmore College	SUNY: Hudson Valley Community College				
SL Green Realty Corp.	SUNY: Institute of Technology at Utica/Rome				
SmartWatt Energy, Inc.	SUNY: Jamestown Community College				
Societe Generale	SUNY: Jefferson Community College				
Solow Building Company, LLC	SUNY: Monroe Community College				
SSHS Sound Shore Medical Center	SUNY: Morrisville				
St. John's Riverside Hospital	SUNY: New Paltz				
St. John's University	SUNY: Niagara County Community College				
St. Joseph's Hospital Health Center	SUNY: North Country Community College				
St. Luke's Cornwall Hospital	SUNY: Office of Sustainability				
St. Mary's Healthcare System for Children	SUNY: Oneonta				
Standard Solar	SUNY: Onondaga Community College				
Staples	SUNY: Orange County Community College				
Starwood Hotels and Resorts	SUNY: Oswego				
State University Of New York	SUNY: Physical Plant Administrators Association (PPAA)				
Staten Island Historic Society	SUNY: Plattsburgh				
Stop & Shop	SUNY: Polytechnic Institute				
Summit Glory LLC	SUNY: Potsdam				
Summit Hotels & Resorts	SUNY: Purchase College				
SUNY Global	SUNY: Rockland County Community College				
SUNY: Adirondack	SUNY: Schenectady Community College				
SUNY: Administration	SUNY: State University Construction Fund				
SUNY: Alfred College of Ceramics	SUNY: Stony Brook				
SUNY: Alfred State College of Technology	SUNY: Suffolk County Community College				
SUNY: Binghamton University	SUNY: Sullivan County Community College				
SUNY: Brockport	SUNY: The Research Foundation for SUNY (Canton)				
SUNY: Broome Community College	SUNY: Tompkins-Cortland Community College				
SUNY: Buffalo State	SUNY: Ulster County Community College				
SUNY: Canton	SUNY: University at Albany				
SUNY: Cayuga Community College	SUNY: University at Buffalo				
SUNY: Clinton Community College	SUNY: Upstate Golisano Children's Hospital				
SUNY: Cobleskill	SUNY: Upstate Medical University				
SUNY: Cobleskill College of Agriculture and Technology	SUNY: Upstate University Hospital Community Campus				



Key Accounts					
SUNY: Westchester Community College	Union College				
Syracuse University	United Nations				
Taconic Investment Partners	University of Rochester				
Target	UofR: Eastman School of Music				
Telx / The Telx Group	UofR: Memorial Art Gallery				
Testa Construction	URMC: Highland Hospital of Rochester				
The Bank of New York Mellon Corporation	URMC: Strong Memorial Hospital				
The Blackstone Group LP	URMC: University of Rochester Medical Center				
The College of New Rochelle	VA: Buffalo VA Medical Center				
The College of Saint Rose	VA: Canandaigua VA Medical Center				
The Feil Organization	VA: Castle Point Medical Center				
The Gap	VA: James J Peters VA Medical Center				
The Great Atlantic and Pacific Tea Company	VA: Montrose VA Medical Center				
The Moinian Group	VA: Stratton VA Medical Center				
The Mount Sinai Hospital	VA: Syracuse VA Hospital				
The New School	VA: VA Hospital System				
The Port Authority of New York & New Jersey	Vassar College				
The Queens LIbrary	Verizon Communications Inc.				
The Related Companies	Viacom				
The Sage Colleges	Vornado Realty Trust				
The Sapir Organization	Waldorf-Astoria				
The Trump Corporation	Walgreens				
Thomson Reuters	Walmart				
Thor Equities	Wegmans Food Markets, Inc				
TIAA-CREF	Wells Fargo & Company				
Time Warner Cable	West Hils Country Club				
Time Warner Inc.	Westchester Medical Center				
Tishman Hotels	White Plains Hospital				
Tishman Speyer	Whole Foods Market				
TJX Companies	Wildlife Conservation Society				
Toyota Material Handling	Wilmorite Management Group				
Trane	Woodbine Group				
Travelers Cos.	Wyndham Worldwide				
Trinity Real Estate	Yahoo! Inc				
UBS Bank USA	Yancey's Fancy Inc.				
UBS Wealth Management	Yankee Stadium				
UHS: United Health Services Hospitals, Inc.	Yeshiva University: Albert Einstein College of Medicine				



APPENDIX D: EXAMPLE WEBINAR INVITE



Webinar: Leveraging NYSERDA Funds for Energy-Efficiency Upgrades.

Funding is available from the New York State Energy Research and Development Authority (NYSERDA) to help offset the capital cost of energy-efficiency upgrades to commercial facilities across New York State.

Energy Service Companies (ESCOs), vendors, consultants and other stakeholders can receive incentives or help their customers receive incentives for energy-saving technologies installed in commercial facilities across New York State.

Webinar attendees will learn about:

- NYSERDA's energy-efficiency program offerings
- Qualifying measures such as lighting upgrades, VFDs, motor upgrades, economizers, HVAC upgrades, chiller replacements, boiler/furnace upgrades and energy management systems
- How NYSERDA incentives can benefit ESCOS, vendors, consultants and other stakeholders

We're here to help your clients reduce energy consumption.

Willidan Energy Solutions 55 Broadway, Suite 1900 New York, NY 10005 T: 212.701.7294 awright@willidan.com Learn how you and your customers can receive funding for installing energyefficient equipment in commercial facilities.

Tuesday, Oct. 29, 2013 2:00-2:45 PM EDT

Register Now

For more information contact: Andrew McCornack Willidan Energy Solutions T: 212.701.7264 E: emccornack@wildan.com

Anastasia Wright Willidan Energy Solutions T: 212.701.7294 E awight@wildan.com

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APPENDIX E: LARGE TENANT PROGRAM FINAL MEMO

TENANT PILOT OUTREACH SUMMARY: GOALS AND RESULTS

Willdan Energy Solutions has prepared this project review memorandum to mark the completion of our Tenant Pilot outreach engagement with NYSERDA.

On January 30th, Willdan began outreach activities to CRE tenant stakeholders with the goal of recruiting tenants to participate in energy modeling pilots. Willdan leveraged exiting industry relationships to quickly identify potential candidates and conducted a direct and indirect outreach campaign that introduced the program to:

- 23 CRE owners and managers,
- 19 CRE tenants,
- 44 A&E firms with building modeling practices,
- 3 project management companies with CRE tenant practices, and
- 3 research partners.

Within two months, Willdan reached the goal of enrolling five (5) approved pilots with two (2) additional projects waitlisted.

The successfully enrolled pilots are:

- 1. White and Case moving into 1221 Avenue of the Americas, a Rockefeller Group building.
- 2. Paul Hastings moving into 200 Park Ave, a Tishman Speyer building.
- 3. MetLife moving into 200 Park Ave, a Tishman Speyer building.
- 4. Rudin Management moving into 345 Park Ave, a Rudin building.
- 5. **Gensler** in the process of selecting office space once enrolled.

The waitlisted pilots are:

- 1. An anonymous Gensler client moving into a modern, highly efficient building.
- 2. Blackrock's building in Midtown.

After enrollment, Willdan also coordinated initial communications as well as kick-off meetings, site visits, and design-team introductions for the three ongoing pilots: MetLife, Paul Hastings, and White & Case. While Rudin Management's and Gensler's timelines allow for more coordination time with NYSERDA, they are expected to enter design phase this year.

We are pleased to conclude this outreach phase.



SECTION 1: OUTREACH STRATEGY

1.1 Marketing Material

Willdan developed marketing material to be used in targeted email and phone campaigns. Marketing material included approved messaging for the industry, as well as case studied relevant for each industry group and tenant function. Through its research, for instance, Willdan found an HPDP case study published by an international law firm and by NRDC. This case study presented a success story that was used to recruit, White and Case, a law firm that is now participating in the program.

1.2 Direct Outreach to Potential Borrowers

Willdan identified five target industry groups:

- CRE Owners
- CRE Managers
- CRE Tenants
- CRE Brokers
- Architecture and Engineering firms

Willdan performed direct outreach by identifying and building relationships with organizations within each target group. The goal of this task was to quickly and effectively identify partnerships and advocates that would benefit from participating in this program.

Willdan did not only target these specific industry groups, but also individual decision-makers within each group. Our direct outreach efforts, therefore, engaged decision-makers spanning Directors, Operations Managers, Sustainability Managers, and Sustainable Design Directors.

1.3 Indirect Outreach through Strategic Partners

Willdan also conducted outreach to other key strategic partners to identify customers interested in building modeling studies. The goal of this task was to maximize customer referrals by developing and leveraging working relationships with pilot project sources. This meant working with strategic partners who have established, trusting relationships with potential tenants and can help our team deliver NYSERDA's message.

Target strategic partner types include:

- Energy audit firms/engineering firms
- ESCOs
- Trade associations reaching CRE owners and managers



SECTION 2: LESSONSLEARNED

Willdan can offer a number of insights based on its recent outreach efforts:

- Tenant representatives have proven to be an essential ally throughout the outreach, enrollment, and project implementation process. NYSERDA would benefit from developing new relationships and strengthening its existing ones.
- Tenants and their representatives feel strongly about their design teams. Willdan observed that, in each of the pilots, tenants demonstrated a strong desire to continue to with their design team rather than introduce a new energy modeler. NYSERDA may benefit from offering flexibility for tenants to continue to work with their previously selected engineering, architecture, and design teams.
- Based on the response received from all industry groups and strategic partners contacted, it is clear that NYSERDA's most valuable partners for this program are Architecture and Engineering firms that have tenant-dedicated services. These firms have account managers that may provide a direct point of contact to tenants in the process of moving or upgrading their spaces. It is important to note that they will offer their support as long as they have an opportunity to be involved in the process. This is because they have a business interest in developing the energy model, and also because they have an obligation to ensure their client's interests are met.

Willdan would like to recommend further research on several topics it identified in this initial outreach process. We would appreciate the opportunity to discuss the following points with NYSERDA in further detail in the future:

 Survey CRE owners and managers to better understand their motivations for participating in a tenant efficiency program

Owners and managers have not yet provided their feedback about this program. This feedback could be gained through targeted surveys and interviews.

- Willdan believes there is further insight to be gained about perceived benefits and risks for introducing tenants to programs such as this pilot.
- NYSERDA could benefit from better understanding and leveraging factors that may encourage or discourage the owners/managers sharing of existing building models with new tenants at lease signing (if not previously).
- The broker community in an important piece of the puzzle but remains elusive.
 - This industry group has not shared their reservations or enthusiasm about the program.
 Willdan believes there is valuable insight that could be gained through direct and indirect research and targeted interviews
- Other stakeholders play a key role in tenant decision-making processes.
 - Through this initial outreach phase, Willdan identified new industry groups, such as tenant



project managers, that could provide additional market reach. NYSERDA would greatly

benefit from further market research, a comprehensive map of all stakeholders (functions and company names) that will have a role in the future success of the CRE tenant program.

Better leverage industry resources and certifications

- Willdan can assist in producing a summary of relevant training available and in developing appropriate NYSERDA-specific certification for the CRE tenant program.

It has been our pleasure to work with NYSERDA leading the outreach to CRE tenant stakeholders. Willdan is eager to conduct further market and industry research to help inform the CRE tenant program and will welcome the opportunity to discuss further steps.

Kind regards, Mayra Lujan Program Coordinator 646-787-6846



APPENDIX A

Relationship mapping for each pilot.

TENANT	Whi	White & Case				
BUILDING ADDRESS	122	1221 Avenue of the Americas				
SIZE	9 flo	ors, 500,000 sqft				
BUILDING OWNER	Rock	kefeller Group				
LEASE LENGTH	20 y	ears				
TIMELINE	Con	struction document by Jan 2016. Move ir	2017.			
STATUS	Modeling					
CONTACT NAME		COMPANY	ROLE			
Raymond Pezzuti		White & Case	Tenant			
Marc Feldman	Robert Derector Associates (RDA)		MEP			
Jack Jenkins	ack Jenkins Robert Derector Associates (RDA) Modeler					
Mark A. Deieso	rk A. Deieso Gardiner&Theobald Project Manager					
Robinson Trimble Gardiner&Theobald Project Mar			Project Manager			
Dante Abbate		Rockefeller Group	Building Access			
Joe Metcalfe	Ilfe Rockefeller Group Tenant Access					
William Fischer		HYL Architecture	Design: office space			
НОК		НОК	Design: common spaces, systems			



TENANT	Paul	Paul Hastings			
BUILDING ADDRESS	200	200 Park Ave			
SIZE	186,	000 sqft			
BUILDING OWNER	Tish	man Speyer			
LEASE LENGTH	16 y	ears			
TIMELINE	Cons	struction documents Jan 2016. Move in N	Лау 2016		
STATUS	Pre l	Pre kick-off			
NOTE	Open incentive application for BMS upgrades. Alex Jahn is PM				
CONTACT NAME		COMPANY	ROLE		
сонтаст наме Mary Jane Artese		сомрану Paul Hastings	ROLE Tenant		
CONTACT NAME Mary Jane Artese Linda Warne		сомраму Paul Hastings Robert Derector Associates (RDA)	ROLE Tenant MEP		
CONTACT NAME Mary Jane Artese Linda Warne Jack Jenkins		сомраму Paul Hastings Robert Derector Associates (RDA) Robert Derector Associates (RDA)	ROLE Tenant MEP Modeler		
CONTACT NAME Mary Jane Artese Linda Warne Jack Jenkins Tamela Johnson		сомраму Paul Hastings Robert Derector Associates (RDA) Robert Derector Associates (RDA) Gardiner&Theobald	ROLE Tenant MEP Modeler Project Manager		
CONTACT NAME Mary Jane Artese Linda Warne Jack Jenkins Tamela Johnson Kimberly Fix		сомраму Paul Hastings Robert Derector Associates (RDA) Robert Derector Associates (RDA) Gardiner&Theobald Gardiner&Theobald	ROLE Tenant MEP Modeler Project Manager Project Manager		
CONTACT NAME Mary Jane Artese Linda Warne Jack Jenkins Tamela Johnson Kimberly Fix Mark Landstrom		сомраму Paul Hastings Robert Derector Associates (RDA) Robert Derector Associates (RDA) Gardiner&Theobald Gardiner&Theobald Tishman Speyer	ROLETenantMEPModelerProject ManagerProject ManagerOwner/Manager		





TENANT	MetLife					
BUILDING ADDRESS	200 Park Avenue					
SIZE						
BUILDING OWNER	Tishman Speyer					
LEASE LENGTH						
TIMELINE	Modeling NCP application submitted					
STATUS	Open incentive application for BMS upgrades. Alex Jahn is PM					
CONTACT NAME	COMPANY	ROLE				

CONTACT NAME	COMPANY	ROLE
Mary Jane Artese	Paul Hastings	Tenant
Jasmine Amaso	JLL	Tenant Rep
Dana Schneider	JLL	Tenant Rep
Mateo Cornin	SPC	NCP PM
David Briefel	Gensler	Architect: Consulting
Kate Kelly	Gensler	Architect: Consulting
Ross DiLiegro	Gensler	Architect: Consulting
Ricardo Casas	Gensler	Architect: Design
Jake Derlaga	Cosentini	Modeler: Lead
Christopher DiLeo	Cosentini	Modeler
Whitney Smith	Cosentini	Modeler
Mark Landstrom	Tishman Speyer	Owner, Manager
JP Flaherty	Tishman Speyer	Owner, Manager





TENANT	Rudin Management		
BUILDING ADDRESS	345	345 Park Avenue	
SIZE	1.5 f	1.5 floors, 35,000 sq. ft.	
BUILDING OWNER	Rudi	n Management	
LEASE LENGTH			
TIMELINE	Cons	struction Documents TBD summer 2015	
STATUS	Application Review		
CONTACT NAME		COMPANY	ROLE
CONTACT NAME Gene Hennessy		сомрану Rudin	ROLE Tenant, Owner, Manager
CONTACT NAME Gene Hennessy Gene Boniberger		сомрану Rudin Rudin	ROLE Tenant, Owner, Manager Tenant, Owner, Manager
CONTACT NAME Gene Hennessy Gene Boniberger Rios, Luis		сомрану Rudin Rudin Rudin	ROLE Tenant, Owner, Manager Tenant, Owner, Manager Tenant, Owner, Manager
CONTACT NAME Gene Hennessy Gene Boniberger Rios, Luis Caggiano, Corinne		сомраму Rudin Rudin Rudin Rudin	ROLE Tenant, Owner, Manager Tenant, Owner, Manager Tenant, Owner, Manager Tenant, Owner, Manager
CONTACT NAME Gene Hennessy Gene Boniberger Rios, Luis Caggiano, Corinne Jim Dolan		сомрану Rudin Rudin Rudin Rudin OLA	ROLE Tenant, Owner, Manager Tenant, Owner, Manager Tenant, Owner, Manager Tenant, Owner, Manager Modeler, MEP





TENANT	Gensler	
BUILDING ADDRESS	TBD	
SIZE		
BUILDING OWNER		
LEASE LENGTH		
TIMELINE		
STATUS	Selecting space	
CONTACT NAME	COMPANY	ROLE
TBD	Gensler	Tenant
TBD	Gensler	PM
TBD	Gensler	Architect: design
TBD	Gensler	Modeler: lead
TBD	Gensler	Modeler
TBD	Gensler	Modeler
David Briefel	Gensler	Architect: Consulting
Kate Kelly	Gensler	Architect: Consulting
Rodd DiLiegro	Gensler	Architect: Consulting





APPENDIX B

Stakeholders contacted during the initial outreach round.

OWNERS/MANAGERS	INDIVIDUALS CONTACTED	MULTIPLE DISCUSSIONS
Abramson Brothers	Single	No
APF Properties	Multiple	No
Boston Properties	Multiple	No
Brookfield Office Properties	Multiple	Yes
Emmes Asset Management	Multiple	No
Enterprise Asset Management	Multiple	No
Hearst Corporations	Multiple	No
Hines	Single	No
Jamestown Properties	Single	Yes
JRT Realty	Multiple	No
Moinian Group	Single	Yes
Murray Hill Properties	Multiple	No
ORDA Management	Multiple	No
Paramount Group	Single	Yes
Rockefeller Group	Single	Yes
Rose Associates	Single	Yes
Rudin Management	Multiple	Yes
RXR Realty	Single	Yes
Shorenstein Realty Services, L.P.	Multiple	Yes
SL Green	Single	Yes
TIAA-CREF	Single	Yes
Tishman Speyer	Single	Yes
Vornado	Single	No





TENANTS	INDIVIDUALS CONTACTED	MULTIPLE DISCUSSIONS
Amazon	Single	Yes
AMC Networks	Single	Yes
Bloomberg	Single	No
Buzzfeed	Multiple	No
Eileen Fisher	Single	No
Estee Lauder	Single	No
Gensler	Multiple	Yes
Hudson Bay Co.	Single	No
Kaplan	Single	No
Kirkland and Ellis	Single	Yes
MetLife	Single	Yes
NBC	Single	Yes
Paul Hastings	Single	Yes
Publicis Group	Single	No
PVH	Single	No
Rudin Management (Executive Offices)	Multiple	Yes
Saks Fifth Ave	Single	No
TED Talks	Multiple	Yes
White and Case	Single	Yes





A&E FIRMS	INDIVIDUALS CONTACTED	MULTIPLE DISCUSSIONS
AKF	Multiple	Yes
Arup Engineers	Multiple	No
Build Efficiently	Multiple	No
CCS Architecture	Multiple	No
CHA Consulting	Multiple	No
Code Green	Multiple	Yes
Concessi Engineering, P.C.	Multiple	No
Cosentini Associates	Multiple	Yes
CSA Architects	Multiple	Yes
Ecological Partners	Multiple	No
Ecosystem-Energy	Multiple	Yes
Edwards and Zuck	Multiple	No
EME Consulting Engineering Group, LLC	Multiple	No
Eneractive Solutions	Multiple	No
Environ	Multiple	No
EYP Inc	Multiple	No
Facility Solutions Group	Multiple	No
Gardiner and Theobold	Multiple	Yes
Gensler	Multiple	Yes
Goldman Copeland Associates (GCA)	Multiple	Yes
Grimshaw Architects	Multiple	Yes
Guth DeConzo Consulting Engineers	Multiple	No
НОК	Multiple	No
JAS Consulting	Multiple	No
JB&B	Multiple	Yes
Johnson Controls (JCI)	Multiple	No
Lizardos Engineering	Multiple	No
Malcom Pirnie	Multiple	No
MG Engineering	Multiple	No
OLA	Multiple	Yes
OMA Architects	Single	No
Paladino	Multiple	No
Retroficiency	Multiple	No
Robert Derector Associates	Multiple	Yes
Setty & Associates	Multiple	No
SOM	Multiple	Yes
Taitem Engineering	Multiple	No
The Daylight Savings Company (Daylight)	Multiple	No
Trane	Multiple	No
Urban Fabrick	Multiple	No
WB Engineering	Multiple	Yes
Wendel Energy Services	Multiple	Yes



		WILLDAN Energy Solutions
WM Group Engineers	Multiple	Yes
YR&G	Multiple	Yes





PROJECT MANAGEMENT & TENANT ADVOCACY FIRMS	INDIVIDUALS CONTACTED	MULTIPLE DISCUSSIONS
Gardiner&Theobald	Multiple	Yes
JLL	Multiple	Yes
Robert Derector Associates	Multiple	Yes

MARKET AND TECHNICAL RESEARCH	INDIVIDUALS CONTACTED	MULTIPLE DISCUSSIONS
Costar	Single	Yes
Credit 360	Multiple	Yes
Robert Derector Associates	Single	Yes





APPENDIX F: NYSERDA LEAN MEMO

NYSERDA Lean Commercial Customer Engagement

Data Collection and Triage Standard Process

Draft – 9 June 2015 Jim Ferris and Zak Suttile





INITIAL TRIAGE PROCESS

1. Sources of Inquiry

Inquiries about NYSERDA Programs may be received through the NYSERDA program websites; NYSERDA Solutions Microsite; the Outreach email address (outreach@nyserda.ny.gov); the telephone hotline (1-866-774-8818); and the Outreach Contractors.

- a. Inquiries through the NYSERDA program websites and the Solutions Microsite will be pre-triaged into requests for information only ("Info-Only" inquiries) and requests for assistance with a specific project ("Project Ready" inquiries) by NYSERDA Marketing.
 - i. Project Ready leads will be forwarded to the designated Triage Outreach Contractor.
 - ii. Info-Only leads will be handled by NYSERDA Marketing.
- b. Inquiries through the Outreach email; the telephone Hotline; and from the Outreach Contractors may be either Project Ready or Info-Only.

2. Handling of Inquiries

a. Inquiries from the NYSERDA website and the Solutions Microsite

The Triage Outreach Contractor will check Salesforce to see if the account already exists and has an Account Owner.

- i. If the account is in Salesforce, enter the inquiry as an "Opportunity" in Salesforce under the existing "Account". Refer the "Opportunity" to the appropriate outreach contractor/referral recipient (see section below regarding "appropriate outreach contractor/referral recipient"), and document the referral in Salesforce. On the "Opportunity" page, input the inquiry date in the "Initial Notification of Customer Project" field located in the "Application Status" section.
- ii. If the account is not in Salesforce, enter the account and the inquiry as a new "Account" and then as a new "Opportunity" in Salesforce. Designate the appropriate outreach contractor/referral recipient as the account owner, refer the "Account" and attendant "Opportunity" to the account owner, and document the referral in Salesforce. On the "Opportunity" page, input the inquiry date in the "Initial Notification of Customer Project" field located in the "Application Status" section.

Once per week, the Triage Outreach Contractor will review a list of Info-Only inquiries provided by NYSERDA Marketing received during the previous week. If an Info-Only inquiry was received from an existing Salesforce account, inform the appropriate outreach





contractor/referral recipient for their information only, and document the action in Salesforce

b. Inquiries from Outreach Email Address or Telephone Hotline

The Triage Outreach Contractor receives all inquiries from the Outreach email address and the telephone hotline, and will determine if the inquiry is Info-Only or Project-Ready. The Triage Outreach Contractor will check Salesforce to see if the account exists and has an account owner. If the account exists in Salesforce, enter the inquiry as a "Lead" or an "Opportunity" in Salesforce, as applicable (see below).

i. Info-Only Inquiry

For an Info-Only inquiry, refer the Lead to the appropriate outreach contractor/referral recipient (for their information only) and to NYSERDA Marketing, and document the referral in Salesforce. NYSERDA marketing will be responsible for follow-up.

If the account is not in Salesforce, enter it and the inquiry as a Lead in Salesforce, refer the Lead to NYSERDA Marketing, and document the referral in Salesforce. NYSERDA marketing will be responsible for follow-up.

ii. Project Ready Inquiry

For a Project-Ready inquiry, refer the "Opportunity" to the appropriate outreach contractor/referral recipient for follow-up, and document the referral in Salesforce. The appropriate outreach contractor/referral recipient will follow the procedures in the *Data Collection Process – Final Triage Process* described below

If the account is not in Salesforce, enter the account and the inquiry as a new "Account" and then as a new "Opportunity" in Salesforce. Designate the appropriate outreach contractor/referral recipient as the account owner, refer the "Account" and attendant "Opportunity" to the account owner, and document the referral in Salesforce. On the "Opportunity" page, input the inquiry date in the "Initial Notification of Customer Project" field located in the "Application Status" section.

c. Inquiries through Outreach Contractors

A large proportion of the customers inquires will continue to come directly through the efforts of Outreach Contractors. These inquires will be handled by the responsible Outreach Contractor and if needed, will be referred using the process below.





4. Appropriate Outreach Contractor/Referral Recipient

a. Until all EES Outreach Contractors support all NYSERDA EES programs, the appropriate Outreach Contractor/Referral Recipient will be determined as follows:

NYSERDA Program	Outreach Contractor/Referral Recipient
EFP, DMP and FlexTech	Buildings Outreach Contractor based on vertical and
	location
NCP	Designated NCP Contact
IPE/Data Center	Designated NYSERDA IPE/Data Center Contact
Multi-Family	Designated NYSERDA Multi-Family Contact
Cleaner, Greener	Designated NYSERDA CGC Contact
Communities	
СНР	Designated NYSERDA CHP Contact
Renewable Energy	Designated NYSERDA Renewable Energy Contact
Small Account (Tier 3)	EDGE Contractor based on location
All Other Programs/Inquiries	NYSERDA Buildings Outreach Project Manager

b. When all Outreach Contractors support all NYSERDA Programs, the appropriate outreach contractor/referral recipient will be determined based on protocols to be developed.

DATA COLLECTION PROCESS - FOR "PROJECT READY" INQUIRIES

1. Data collection necessary for CFA

The information included in the NYSERDA data checklist will be collected by the Outreach Contractor(s) with the assistance of the customer. Presently, the data checklist will be used as a guide for Outreach Contractors and not sent to customers. The information will then be entered into Salesforce and used for project tracking purposes.









After the Outreach Contractor has completed NYSERDA's data checklist, the information from the data checklist will be copied into NYSERDA's Outreach CRM tool, Salesforce.com. NYSERDA staff, the Triage Outreach Contractor or another member of the Outreach Team will transcribe the data checklist fields into corresponding fields in Salesforce as an "Opportunity".

In addition to the specific project data, the Outreach Contractor will be responsible for entering data in date fields within the Salesforce opportunity record that will be used for tracking project and program metrics. These fields will include the following key milestones in the outreach process.

- Date when the customer first engaged us via phone, email, meeting, event, web form, etc. will be automatically created when a new "Account" or "Lead" is created in Salesforce
- 2. Date when they first mentioned a project and outreach asked for additional project details, as a XX/XX/XXXX date field will be on the Opportunity page, in the "Application Status" section
- 3. Date when the CFA was submitted as a XX/XX/XXXX date field on the Opportunity page, , in the "Application Status"

Project and/or program metrics will be periodically collected to determine the following:

- 1. <u>Cycle 1</u>: The time elapsed between #1 and #2 in section above (in days)
- 2. <u>Cycle 2</u>: The time elapsed between #2 and #3 in section above (in days)

3. Final Triage Process

Once the "Opportunity" is generated in Salesforce, the final triage process will start. The primary Triage Outreach Contractor will have access to all new "Opportunities" in Salesforce and have the ability to refer and assign individual Outreach Contractors to review and contact the customer directly to continue the outreach process.

- 1. The Outreach Contractor will call the customer using the information provided and record the phone call in Salesforce using the Standard Operating Procedures developed by Willdan.
- 2. After a call has been made, the Outreach Contractor will also send an email to the customer to memorialize the conversation that took place, recommend next steps, or request a response if the customer was not reached. If additional information is required to move the project forward, the Outreach Contractor will list out which information is necessary to complete a CFA and request the information be provided within 10 business days of the initial request.
 - i. In order to track the request deadline, the Outreach Contractor will create reminder in Salesforce to <u>follow-up with the customer in 7 business days</u> to remind the customer to provide necessary information for the CFA.
 - ii. Initial and subsequent customer outreach and potential project information will be tracked under the "Opportunity" record in Salesforce until all information required for a CFA has been provided by the customer. The





follow-up frequency will be left to the discretion of the responsible Outreach Contractor, however, continuous communication should continue until the "Opportunity" is converted to a CFA or is cancelled. <u>A recommended followup rate is one (1) correspondence per week unless a specific timeframe is</u> <u>agreed upon with the customer.</u>

BOILERPLATE EXAMPLES

Email 1: Use to acknowledge receipt of inquiry and active review.

Dear [CUSTOMER],

Thank you for your interest in the New York State Research and Development Authority (NYSERDA). One of our team members will contact you soon to provide information about our offerings and answer any questions you may have.

We look forward to working with you.

Sincerely,

[SENDER]

OR

Dear [CUSTOMER],

Thank you for your interest in the New York State Research and Development Authority (NYSERDA). One of our team members will review the project information that you have submitted and will contact you soon to help you fill out any missing information that is needed.

We look forward to working with you.

Sincerely,

[SENDER]




<u>Email 2</u>: Use when the project information is complete upon initial submission and is approved by Outreach.

Dear [CUSTOMER],

Thank you for submitting details about your project(s) and for your interest in the New York State Research and Development Authority (NYSERDA). Your project will now be assigned to a NYSERDA project manager. If your project start date is within the next two weeks, please let us know immediately.

We look forward to working with you.

Sincerely,

[SENDER]

Email 3: Use when the project information is not complete the first time it is submitted.

Dear [CUSTOMER]

It was a pleasure speaking with you about NYSERDA's [OFFERING]. As discussed, we will need the following items to submit your application:

• [LIST ITEM(S)]

Kindly provide these items within 10 business days to ensure a speedy and streamlined process. I will follow up with you on [DATE] to see how you are progressing. Please don't hesitate to contact me if you have any questions or concerns.

Sincerely,

[SENDER]





Email 4: Use for 2nd data request for incomplete and/or unapproved project information.

Dear [CUSTOMER],

This is a friendly reminder to provide the items requested for your [OFFERING] on [DATE of FIRST ADDITIONAL DATA REQUEST]. This will help us complete your application and ensure that you receive your incentives as quickly as possible. Please reach out if you have any questions or concerns about providing the following:

• [LIST ITEM(S)]

We look forward to working with you.

Sincerely,

[SENDER]

<u>Email 5</u>: Use for 3rd and any subsequent data requests for incomplete and/or unapproved project information.

Dear [CUSTOMER]

Thanks again for your interest in NYSERDA's [OFFERING]. Since our initial conversation on [DATE of CONVERSATION], we have not received the items required to submit a formal application. Please note that you will not be eligible to receive incentives for your upcoming project(s) until we receive the items below:

• [LIST ITEM(S)]

Please reach out if you have any questions or concerns, or if you are no longer interested in [NYSERDA OFFERING].

Sincerely,

[SENDER]



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<u>Email 6</u>: Use when the project information is not complete after multiple (3+) attempts with the customer and the "Opportunity" will be cancelled.

Dear [CUSTOMER],

On [DATE of INITIAL INQUIRY] you expressed interest in learning about [OFFERING]. Since that time, we have not received a response from our efforts to communicate with your organization about the items needed to submit an application. We therefore have classified your organization as no longer interested in participating in the program at this time.

Please note that you are not eligible to receive incentives until a complete application is submitted. If you are still interested in [OFFERING] at this time, please contact me so we can discuss next steps.

Please let me know if you have any questions or concerns about this.

Sincerely,

[SENDER]





APPENDIX A: DEFINITIONS AND CLARIFICATIONS FOR CONSOLIDATED FUNDING APPLICATION

Applicant	The entity that has the authority to make the energy improvements and receiver of the final incentive payment. The Applicant can be the facility owner, facility manager, or tenant, and for all programs other than the New Construction Program, the Applicant can be the service provider or third party developer/aggregator.
Applicant Address	The Applicant's address and where all incentive payments should be sent.
Building Area	For new construction or substantial renovation projects, please list the area impacted by the energy improvement project. For example, if the improvement is lighting in only a portion of the building that is undergoing a substantial renovation, please list the total square footage of the renovation, not the total square footage of the building.
Building Management System (BMS)	A computer-based control system that controls and monitors a building's mechanical and electrical equipment or systems. A BMS system may control: heating and cooling, ventilation, lighting, power systems, etc.
Demand Response	The act of temporarily removing electric load from the electric grid during peak demand periods. DR measures include: load shedding controls, automation equipment, and new generation equipment. Building Management Systems, new generators, or energy storage could also be used to help a building remove electric load from the grid when a DR event is called.
Energy Storage	Refers to a set of technologies capable of storing electricity generated during periods of lower demand and releasing that energy during periods of peak demand. Thermal storage systems, such as ice storage, produce ice at night when electricity prices are low. The ice is then used for cooling during the day during the peak energy demand period. Similarly, a battery storage system is charged at night and then discharged during the day during the peak demand period.
Flex Tech	 Provides a wide range of flexible, cost-shared technical services to help eligible commercial and industrial businesses make informed energy decisions. Eligible study areas include: Cost-shared studies of energy efficiency technical analyses, process improvement analyses, energy master plans, and demand response opportunities of existing facilities for eligible customers Cost-shared on-site combined heat and power (CHP) feasibility studies for eligible customers
WILLDAN Energy Solutions	NYSERDA Buildings Outreach Final Report: 2013 to 2015



IT/Data Centers	Facilities designed to accommodate dense arrangements of computer equipment and associated networking, telecommunications, storage and auxiliary equipment required to store, process, manage, and disseminate data and information. A data center may include redundant power supplies, backup power equipment, and HVAC equipment.
Manufacturing Process	 Projects that install a new process or improvements to an existing process resulting in a gross reduction of energy usage, or a net reduction of energy usage per unit of production. Projects may involve: Industrial process improvements for new installations Capacity additions that improve the energy use per unit processed Quality improvement Waste and scrap reduction Throughput increase IT improvements including server virtualization, storage consolidation, thin clients, applications management, and server load prioritization and optimization
Monitoring-Based Commissioning (MBCx)	The installation of information gathering technologies and software that provide critical data to monitor and alter building operation. Monitoring-based commissioning is also referred to as continuous commissioning and real-time energy management.
Monthly Adjustment Clause	The Monthly Adjustment Clause (MAC) applies to all Con Edison customers except Service Classification No. 11, and under the Retail Access Rate Schedule, except for Service Classification No. 15-RA to the extent the MAC does not apply under the EDDS Rate Schedule. The MAC charge is not always listed on the utility bill, therefore check to see if you pay SBC first and then check your service class to make sure it is not SC 11 or SC 15-RA.
New Construction	A new building, or space within a new building, for which a licensed professional architect or engineer has prepared and certified building plans.
Process Cooling	Cooling equipment that conditions the space the data center is located or non-comfort cooling needed for the manufacturing process.
Project Address	The building or location where the energy efficiency or energy improvement work is to be completed.





Project Start Date	For existing buildings, the project start date is the date equipment will be removed or installed. For new construction, this is the date at which the design process will begin.
Renewable Energy	Energy that is produced from fuel sources that are naturally replenished over short periods of time and are not depleted when used. Examples of renewable energy include: solar, wind, hydro, biomass, and geothermal.
Substantial Renovation	 Defined as one of the following types of projects for which a licensed professional architect or engineer has prepared and certified building plans. Change of use and reconstruction of an existing building or the space within it Construction work requiring that the building or space within it be out of service for at least 30 consecutive days Reconstruction of a vacant structure or the space within it
System Benefits Charge	The System Benefits Charge (SBC) program funds technology and market development activities relevant to the energy system. The Public Service Commission uses SBC to support research and development efforts that promote new technologies through the state's energy-efficiency and renewable energy programs. NYSERDA implements the program under the Public Service Commission's supervision. For Con Edison customers, the SBC applies to all service classifications except SC 11, SC 15, load served under Rider Q, and load served under Special Provision G of SC 9. Your SBC charge and your service classification can be found on your utility bill.
Total Energy Saved	A sum of the total estimated energy saved for each measure or project proposed. If you have received proposals from vendors with estimated energy savings, please include these estimates in this total. This can also be a rough estimate that will be refined as the project moves forward. If you are unsure of how to calculate this number, please leave this field blank and a NYSERDA expert will contact you to help you calculate your total estimated energy saved.

