

# Connecting the Commercial Real Estate Market and Utilities: Achieving Energy Savings in Commercial Buildings

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## ABSTRACT

The innovative Utility and Commercial Real Estate partnership program, “Connect,” developed by Waypoint Building Group, leverages existing market infrastructure and data to successfully deploy energy efficiency programs. This approach was launched in Pacific Gas & Electric (PG&E) Company service territory in 2014 (and is currently ongoing) in an effort to overcome barriers with traditional energy efficiency programs and market engagement practices that are often implemented without analysis of key data for owners and tenants. The Connect Program leverages the data and access provided by these property management partners to limit marketing costs, while improving the conversion rate of individual building engagements by giving these key partners targeted support in creating effective business cases for efficiency investments. The portfolio approach of the Connect Program allows for development of strong relationships and communication channels with property managers, owners, and tenants facilitating collaboration amongst decision makers. Additionally, project energy efficiency recommendations are incorporated into annual capital budgeting cycles. As tenant spaces roll over, design guidance is also provided to help ensure that already planned renovations include cost-effective efficiency measures. Taken together, these strategies combine to increase the uptake of existing utility incentive programs in traditionally hard-to-reach sectors. To date, the PG&E Connect Program has: enrolled and reviewed 218 buildings totaling ~28.2 million square feet (SqFt); completed 50 building assessments for ~8.8 million SqFt; identified 262 energy conservation measures (ECMs); and installed 19 ECMs resulting in an estimated annual savings of 4.9 million kWh, 13,320 therms, and \$133,000 incentive dollars.

## Motivation: The Split-Incentive Challenge

The commercial real estate (CRE) market and utility sector often have differing perspectives on efficiency, as well as differing motivations for achieving energy savings. The CRE industry is a highly complex environment marked by multiple stakeholders with conflicting incentives, complex investment cycles and priorities, and multiple decision makers. To drive energy savings, the utility first must navigate the CRE split-incentive barrier that occurs when the party who pays the upfront costs of an efficiency improvement is different from the one who benefits from energy savings (DOE 2016). Depending on the predominant lease structure, the costs and benefits of potential energy efficiency improvements are thus misaligned between owners and tenants, causing one or both parties to reject even the most financially attractive energy efficiency projects. In most investor-owned multi-tenant office spaces, variability in both lease structure and tenant improvement (TI) funding structure commonly impacts the success of traditional utility outreach and engagement strategies. Figure 1 illustrates the full spectrum of incentives between owner and tenant in a typical TI fit-out with respect to energy efficiency. In full service gross leases, the owner receives full energy savings; in triple net leases, the tenant

receives full energy savings; and, in modified gross leases, the savings are split between the owner and the tenant. When the TI structure is an allowance, the first cost is pushed to the owner, while turnkey TI structures push the first cost to the tenant. Master metered spaces allow the owner to capture the full amount of energy savings a building generates, while sub-metered spaces allow tenants to capture the full amount of energy savings they generate. Understanding and navigating this dynamic environment within multi-tenant office spaces is critical in order for utilities to provide the right stakeholders with the right information at the right time.

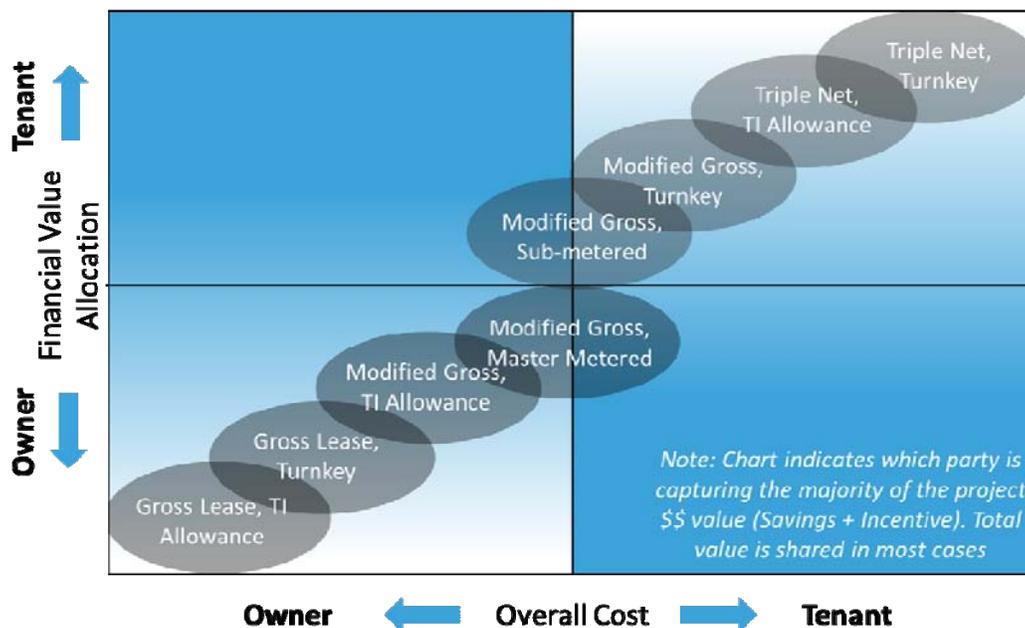


Figure 1. Tenant Lease and Tenant Improvement Cost/Value Structure. *Source:* Waypoint.

Utilities may also lack visibility into the tenants who occupy investor-owned, multi-tenant office buildings. For example, the bill-paying customer of record may not align with the decision-making authority for energy efficiency improvements in the space while underlying tenants are invisible to the utility.

Further, timing an energy efficiency project appropriately for a customer vis-a-vis the capital planning process is important for utility collaboration. Utility annual calendars do not always align with CRE project planning schedules since property life cycles and budget cycles are structured and immovable. If a project is recommended after a customer’s capital planning cycle has ended, or a TI improvement is completed, the utility must wait another fiscal year for the project opportunity to be considered. Note that this applies mainly to larger efficiency projects as opposed to smaller opportunities that may fit within a building’s operations and maintenance (O&M) budget. Depending on the building and its size, capital budgets vary considerably. Based on Waypoint’s experience, any project with costs >\$25,000 generally qualifies as a capital project. Therefore, if utility incentive programs are phased out in a certain calendar year, they may miss the CRE capital investment planning period that commonly occurs in the spring and early summer months, or mismatch with upcoming tenant lease expiration schedules. For instance, a building owner who just conducted a lobby renovation planned last year may not have enough remaining budget to cover additional utility-encouraged projects identified this year, even with incentive dollars supporting the business case.

In the typical investment lifecycle of a CRE property, a building owner who recently purchased a property is often more willing to consider implementing large capital upgrades, including efficiency improvements. If ownership is nearing the sell-period of their property, or only plans to hold the property for a short period of time, the owner will be less willing to invest in efficiency measures. Identifying and capitalizing on these critical times in the investment



lifecycle of a building to offer the appropriate incentive program is a prevalent challenge currently faced across the market. Figure 2 presents the common stages of an investor-owned property lifecycle, each with potential opportunities for including energy efficiency. CRE property owners and managers do not always integrate energy efficiency planning as a central point of each stage of the property life cycle; however, the Connect Program understands the opportunity that lies therein and recommends the proper options based on the property’s lifecycle stage.

Figure 2. Energy Considerations in each CRE Property Lifecycle Stage. *Source:* Waypoint.

Conversely, CRE stakeholders may be unaware of utility incentive opportunities for significant energy efficiency projects. Property managers may have difficulty prioritizing energy efficiency projects for their properties, and can struggle to navigate program options and eligibility requirements. While decisions in the CRE market are commonly made based on the financial value added to the net operating income (NOI) of the asset, utilities commonly communicate the benefits of energy efficiency in terms of kWh usage and peak kW demand reductions. While many CRE property management firms have data and insight into how effectively a building is being run, they often encounter barriers including: lack of understanding of how to convert this knowledge into cost-effective energy project implementation; lack of budget for energy management (often considered “overhead” by building staff, and ultimately an additional cost to ownership); lack of a dedicated resource to pursue and implement energy saving projects; and, a lack of owner and/or tenant buy-in to any capital improvements for a building’s infrastructure. Table 1 summarizes the barriers to energy efficiency faced by the CRE market at large.

Table 1: Barriers to Energy Efficiency Faced by the CRE Sector. *Source:* Waypoint.

<b>Barrier</b>	<b>Definition</b>	<b>Example</b>	<b>Solution</b>
Financial	A barrier that prevents investment in energy efficiency due to actual or perceived costs associated with assessing or implementing energy efficiency projects	Office tenants or landlords with medium-length leases or hold periods (3-5 years) are especially sensitive to the timing of financial returns. Reaching a <3-year payback is often a target milestone.	Align ECM business case to metrics that commercial owners and customers respond to, such as \$ spend/SqFt, simple payback, and ROI (may vary by space type).
Market Structure	Barriers resulting from differing motivations and incentives across the range of market actors	The split-incentive barrier, in which costs and benefits of an energy improvement are misaligned between owners and tenants, causing one/both parties to reject the projects	Determine basic value propositions for all parties and align incentives for each party early in the process. Ensure flexibility in utility program design to enable this.
Information & Knowledge	Informational barriers resulting from a lack of transparency and information about energy use, costs, benefits, and savings	A building owner or tenant being unaware of what efficiency options or utility programs are available to them	Communicate consistently, and consider how customers prefer to receive information. E.g. Energy-efficient tenant spaces save money and increase asset value by contributing to certifications such as LEED and ENERGY STAR.
Physical Building	Physical building barriers resulting from the existing nature of the building and its current state of improvements	A recent large building renovation that took place without considering energy efficiency, limiting availability of capital funding leftover for efficiency improvements	Understand the critical nature of CRE project timing and history for each individual building, and align outreach/engagement to building lifecycles and customer leases.

## Solution

To address these common market barriers to energy efficiency implementation in the CRE industry, Waypoint Building Group developed a non-resource utility program, “Connect” (PG&E 2014). First piloted with PG&E in 2014, the Connect Program sought to overcome the traditional barriers to CRE stakeholders adopting utility-promoted efficiency measures. Waypoint’s Connect Program (Waypoint 2016), the process of which is shown in Figure 3, analyzes individual buildings and portfolios of buildings to prioritize projects with the highest opportunity with deliberate attention to end-customer (owner/tenant) characteristics. Waypoint, in conjunction with utility account executives and its existing CRE partners, links existing utility program offerings to the CRE industry by identifying and engaging the appropriate decision makers, with the appropriate programs, at the appropriate time. The program leverages existing market infrastructure and data to more effectively deploy existing energy efficiency programs. This approach yields strong benefits for the CRE sector, including relevant and timely information, streamlined implementation processes, and ongoing incentive processing support. In addition, it benefits utilities by fostering deeper customer relationships and driving increased market penetration and program adoption.



Figure 3. High-Level Connect Program Process. *Source:* Waypoint.

### The Role and Value of CRE Partnerships

CRE partnerships are a vital element of the Connect Program. By working with the leading and largest property management firms in PG&E’s service territory, Waypoint provides PG&E with early insight into buildings that are at critical timing junctures (i.e. during the acquisition or leasing phase) to make building energy improvements. For each iteration of the Connect Program (to date, three CRE firms’ portfolios have participated, totaling three iterations), Waypoint leverages a different CRE firm to ensure widespread and representative participation from properties across the utility territory. This approach adds value to utility efficiency programs by drastically lowering the marketing budget required to gain access to portfolios of buildings and engage key decision makers. In addition, the program is championed by Senior Executives within the CRE partner firms, which helps to reinforce the importance of energy efficiency within each partner’s building portfolio. Furthermore, the Connect Program leverages relationships with multiple staff throughout the property management chain who serve as trusted advisors to decision makers.

The Connect Program leverages the data and access provided by these CRE partners (as shown in Table 2) to limit marketing costs, while improving the conversion rate of individual building engagements, by giving these key partners targeted support in creating effective business cases for efficiency investments. Existing utility programs bring relevant and impactful options to the CRE market, but need targeted messaging with language that resonates with the intended audience.

Table 2: Data Analyzed in the Connect Program. *Source:* Waypoint

<b>Data Source</b>	<b>Data Type per Property</b>
<b><i>PG&amp;E Utility</i></b>	Monthly energy usage, monthly energy spending, annual incentive participation, incentive energy savings, incentive funding amounts, number of meters and service accounts, and maximum peak demand
<b><i>CRE Partner</i></b>	Address, property manager, portfolio manager, building engineer, number of floors, number of SqFt, building age, recent audits, number of tenants, lease structure, and other relevant qualitative and quantitative data pieces

The portfolio approach of the Connect Program allows the utility to develop strong relationships and communication channels with property managers, owners, and tenants, and facilitates collaboration amongst decision makers. Additionally, project energy efficiency recommendations are incorporated into annual capital budgeting cycles. As tenant spaces roll over, design guidance is also provided to help ensure that already-planned renovations include cost-effective efficiency measures. Taken together, these strategies combine to increase the uptake of existing utility incentive programs.

Not only does the Connect Program work with the CRE partners, but it also helps to improve utility program performance through staff education and development. The utility account managers are able to further develop customer relationships through building efficiency plans that have the potential to span multiple-year periods. As such, they are able to develop

additional market deployment channels by expanding the number of property manager partner relationships over time. Customer experience is improved through the innovative engagement strategy with the evolved relationships and increased utility understanding of the CRE market. The long-lasting relationships formed from the Connect Program have the potential to develop a long pipeline of future projects for capture by PG&E programs. This stands to enhance effectiveness across various utility programs by generating customer applications.

### Utility Connect Program Process

First, the Connect Program identifies the CRE partner properties to benchmark, which can span a diverse range of owners and tenants. Waypoint benchmarks the portfolio of properties using data provided by both the utility and the CRE partner and captures key indicators that represent a building’s energy savings potential. Depending on the data available, Waypoint’s benchmarking process weights a number of metrics that influence the energy efficiency opportunity of a property. The metrics fall under three primary categories: financial (a main priority of the CRE partners), usage (a main priority of the utility), and programming (a main priority for Waypoint in considering program feasibility). In traditional CRE fashion, information is not analyzed annually, but rather throughout the trailing 12 months (T12) to show the most recent and actionable data. Figure 4 explains in more detail the methodology behind the Connect Program benchmark metrics. The benchmark compares each property against others in its portfolio, and is based upon the data available to Waypoint and the Connect Program. While not all possible normalizing factors are leveraged in the benchmark (e.g. building sub-type, operating hours, data servers), these and other considerations are factored in qualitatively after the benchmark is completed via collaborative discussions among Waypoint, PG&E, and the CRE Partner.

	Potential Benchmark Metrics	Explanation – Methodology and Goals
<b>Spend (\$)</b> <b>30% weight</b> <b>Financial Performance</b>	<b>Energy Spend (\$)</b> PSF (Trailing 12 Months)	This metric evaluates energy performance while controlling for building size. Commercial building managers & investors often quantify operating expenses and financial performance metrics in per square foot (PSF) terms, and are often evaluated against a baseline established across the regional portfolio. Higher spend per square foot indicates higher savings opportunities as well as likely interest by management and owners to reduce costs.
	<b>Weather Normalized Energy Consumption</b> (Trailing 12 Months)	This metric indicates overall energy saving potential. Buildings with larger consumption will have greater savings opportunities. Weather normalization controls for unusual weather swings and differences between geographical climates.
<b>Usage (kWh)</b> <b>50% weight</b> <b>Energy Savings Potential</b>	<b>% Change in Energy Consumption</b> (Trailing 12 months vs prior year, Normalized for Occupancy if possible)	Buildings with increasing usage trends are typically more motivated to invest in energy savings measures to lower costs. If possible, this metric is normalized for occupancy to account for unoccupied spaces.
	<b>Max Peak Demand</b> (Trailing 4 years)	To manage peak energy prices and to reduce a utility’s max demand levels, identifying buildings with higher peak demand offers greater savings opportunities and utility efficiencies.
<b>Program</b> <b>20% weight</b> <b>EE Program Feasibility</b>	<b>Annual Savings from EE Programs</b> (Trailing 4 years)	Buildings with minimal program participation history may have more savings opportunities than buildings who have historically been more active.
	<b># Active Service Agreements</b>	Incentive programs are often hard to deploy in buildings with several different customers of record (CORs) that benefit from the improvement.

Figure 4: Methodology and Goals for Connect Program Benchmark Metrics. *Source:* Waypoint.

The benchmark analysis results in a weighted rank of each property in the portfolio, and the top properties with the most savings opportunities are recommended as “target buildings” for energy audits. Upon benchmark completion, Waypoint and PG&E present the results together to

the CRE partner. Waypoint then conducts the equivalent of ASHRAE Level 1 utility-funded audits with the property management team to ensure their buy-in and participation. After the audit, Waypoint constructs a customized “target report” that includes actionable energy efficiency measures recommended and a business case with clear payback periods and incentive information. The report is targeted to ownership, and as such, prioritizes projects with short paybacks and references metrics such as return on investment (ROI), payback period, and \$/SqFt. In addition, other non-energy data points are included in the reports to round out the case for each of the recommended efficiency measures. Waypoint presents the target reports in person to decision makers at each building and explains the value of potential measures. This results in a motivated, empowered, property management team with a business case for energy efficiency and support from the Connect Program. This team effort encourages long-lasting CRE relationships with PG&E and sets the stage for ongoing discussions about future energy efficiency incentive opportunities for the next budget cycle.

Once the full suite of information is in the hands of the CRE partners, the Connect Program ensures follow-through on incentive applications and energy efficiency measure implementation. Waypoint processes the utility incentive paperwork hand-in-hand with the property management teams, including obtaining building owners’ signatures when necessary. To ensure a smooth process, Waypoint facilitates communication between PG&E and property management staff with regular check-ins and updates. Because the entire CRE partners’ portfolios are involved in the Connect Program, even if they are not selected for target building audits, they are still eligible for non-target incentive support. Non-target support helps the property management team understand potential incentive opportunities for energy efficiency implementation, and has so far received uptake on an ad-hoc basis with 8-9 motivated property managers. As with each property in the Connect Program, the quantity and type of measures are determined on a project-by-project basis to optimize energy savings and cost effectiveness.

## Program Results

Since 2014, Waypoint has enrolled and benchmarked 218 buildings, comprising 28.2 million SqFt in the office, data center, mixed use, warehouse, industrial, and retail spaces in the PG&E service territory. Table 3 displays the SqFt breakdown of the buildings enrolled in the Connect Program by location. San Francisco, Oakland, and San Jose comprise 54% (or 118) of the total buildings and 71% (or 19.9 million SqFt) of the total square footage analyzed. Waypoint targets buildings located in metropolitan regions because they have a much higher average SqFt, which is often directly correlated to energy usage and power consumption. This strategy prioritizes the highest energy-consuming buildings within PG&E service territory, which maximizes energy savings potential.

Table 3: Utility Connect Commercial Building Benchmark Breakdown by City. Source: Waypoint.

City	Total Buildings	Total SqFt	SqFt by %	Average SqFt
San Francisco	50	11,787,203	42%	235,744
San Jose	51	5,077,687	18%	99,562
Oakland	17	3,055,976	11%	179,763
All Other	100	8,267,056	29%	82,671
<b>Total</b>	<b>218</b>	<b>28,187,921</b>	<b>100%</b>	<b>N/A</b>

Table 4 displays the SqFt and energy usage breakdown for each building by asset type enrolled in the PG&E Connect Program. Office, data center, and mixed-use spaces comprise 26.1 million SqFt, or 93%, of the total portfolio of buildings touched. The Connect Program places a strong emphasis on targeting and driving energy savings in these asset types because these buildings have a much higher annual electric consumption and intensity when compared to light industrial and retail. When selecting properties for audits, this strategy maximizes total energy savings potential, which builds a better business case for the ECMs recommended.

Table 4: Utility Connect Commercial Building Benchmark Breakdown by Asset Type. *Source:* Waypoint.

Asset Type	Total Building Count	Total SqFt	SqFt by %	Average Electric Use Intensity EUI (kWh/SqFt)	Average Annual Electric Consumption (kWh/yr)
Office	126	18,846,481	65%	19	2,353,811
High Tech <sup>1</sup>	40	4,976,745	17%	89	10,670,034
Mixed-Use <sup>2</sup>	20	2,920,676	10%	26	1,694,719
Industrial	20	1,620,464	6%	10	559,018
Retail	13	429,514	2%	14	541,834
<b>Total</b>	<b>218</b>	<b>28,187,921</b>	<b>100%</b>	<b>N/A</b>	<b>N/A</b>

By enrolling the vast amount of buildings in various regional markets within PG&E service territory, Waypoint provides PG&E with a streamlined communications channel to a traditionally hard-to-reach market of buildings. In doing so, the Connect Program gives PG&E the unique ability to drive tailored energy efficiency initiatives to entire portfolios of commercial buildings, ultimately furthering uptake of energy efficiency upgrades at scale.

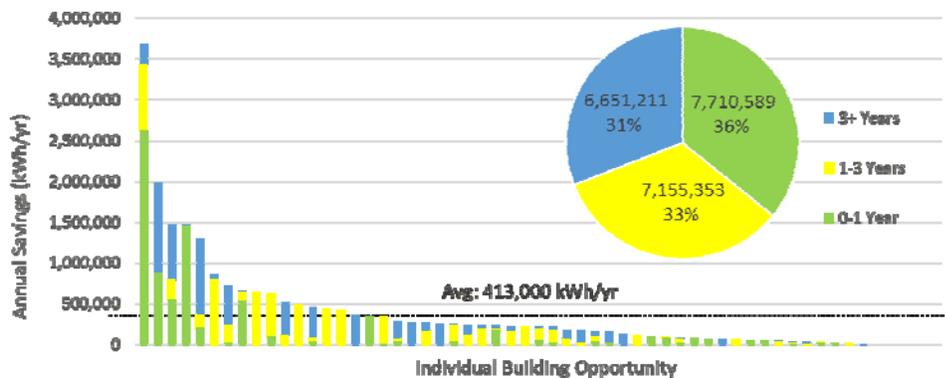


Figure 5: Total Annual kWh Savings Identified for Audited Properties by Payback Period (yr). *Source:* Waypoint.

The PG&E Connect Program has completed 50 building audits comprising over 8.8 million SqFt. From these assessments, 262 ECMs have been recommended resulting in an estimated 21.5

<sup>1</sup> High Tech is defined as commercial building with significant space used for data center/server room or other high tech equipment.

<sup>2</sup> Mixed-Use is defined as mix of office, high tech, industrial, or retail space.

million kWh of identified annual electric savings, 41,000 annual therm savings, and \$1.8 million incentive dollars. 19 ECMs have been adopted resulting in an estimated annual savings of 4.9 million kWh, 13,320 therms, and \$133,000 incentive dollars. Figure 5 displays the total annual kWh savings identified at each individual building broken down by simple payback period. 69% of all of the identified annual kWh savings have a three-year simple payback or less, with 33% measures paying off in one year or less. Waypoint prioritizes ECMs that pay off in three years or less to increase the propensity of owners investing in the upgrades.

Figures 6 and 7<sup>3</sup> display the end-use type for the recommended efficiency projects and the corresponding PG&E incentive program. To date, the Connect Program audits have identified a majority of savings with HVAC and interior lighting projects. Waypoint, PG&E, and building management work together to select measures that meet the customer needs. Table 5 describes the PG&E incentive programs in more detail.

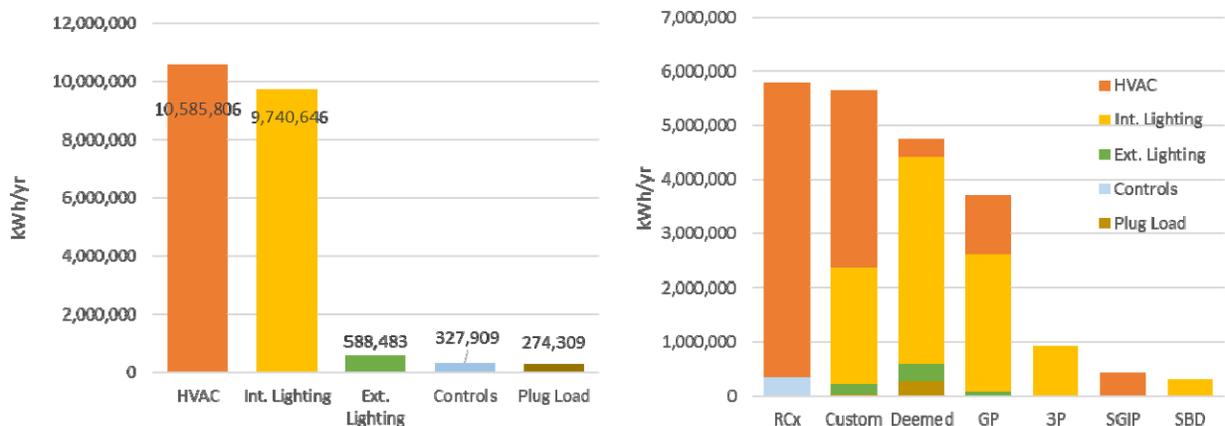


Figure 6 & 7: Total Annual kWh Savings Identified by Equipment Type, and by PG&E Program. *Source:* Waypoint.

Table 5: PG&E Efficiency Program Descriptions. *Source:* PG&E.

Program	Description
<b>RCx</b>	Retro-commissioning Program (RCx): a systematic process focused on incentivizing improvements to the efficiency of existing equipment
<b>Custom</b>	Customized Retrofit Incentive: for installation of energy efficiency improvements based on calculated energy savings
<b>Deemed</b>	Deemed Incentive: an incentive paid directly after installation of high-efficiency equipment
<b>GP</b>	Incentive offering from a PG&E-local government partnership (GP) program
<b>3P</b>	Incentive from third party (3P) programs for energy efficiency improvements
<b>SGIP</b>	Self-Generation Incentive Program (SGIP): incentivizes self-generation projects
<b>SBD</b>	Savings By Design (SBD): focused on incentivizing new construction high-performance building design and construction for commercial buildings

Figure 8 displays the incentive applications submitted for PG&E incentive programs. These resulted in an estimated 4.7 million kWh and 13,320 therms of annual energy savings and \$133,000 of incentive dollars. Waypoint has been successful in utilizing many of the different PG&E program offerings to increase adoption of energy efficiency projects.

<sup>3</sup> Controls are defined as building systems used to control HVAC and lighting equipment use based on occupancy and other factors.

While 16 incentive applications have been signed to date, the Connect Program has established a substantial pipeline of recommended efficiency measures over the last two years, many of which have payback of three years or less. Uptake is expected to increase as the current pipeline of measures continues to be utilized, and as new CRE partners join the program.

### Case Study

Figure 9 displays an example case study of a successful property to participate in the Connect Program from start to finish.<sup>4</sup> The 201 Spear Street property is a 252,591 SqFt, Class A LEED Gold office tower located in San Francisco, managed by Cushman & Wakefield. The 18-floor property was built in 1984, with ~20 tenants and a basement parking lot. By enrolling in the Connect Program, the firm developed a successful business case for ownership to achieve over \$47,000 in annual energy cost savings and ~ 293,000 kWh in annual electric

savings from efficient lighting upgrades and RCx, with up to \$34,000 in PG&E-offered rebates and incentives to defray equipment and service costs. As exhibited in Figure 10, the property manager, Jill Vivanco, found the Connect Program especially impactful, and her property’s participation resulted in significant energy savings with the expectation to implement additional incentive projects in the future.

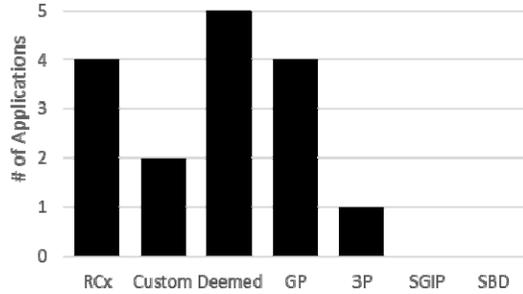


Figure 8. Incentive Applications Submitted for PG&E Incentive Programs. *Source:* Waypoint



Figure 9. Connect Program Case Study for 201 Spear Street Property. *Source:* Waypoint

*“The wealth of information and in-depth report provided by Waypoint is a very useful tool for identifying energy efficiencies and cost-saving projects. Clear, concise information was always presented along with great input, expertise, and knowledge of energy efficiencies. I look forward to continuing to work with Waypoint to track the project’s progress and continue to identify opportunities over time.” - Jill Vivanco*

Figure 10: Connect Program Case Study for 201 Spear Street Property. *Source:* Waypoint.

## Challenges and Key Lessons Learned

The main challenges in implementing utility-incentivized energy efficiency projects in the CRE industry fall under engagement at the building level, as well as timely adoption of energy efficiency measures. Waypoint has collaborated with PG&E to identify and implement solutions to address these challenges in the Connect Program.

### Engaging CRE Stakeholders at All Levels

One of the most difficult challenges is establishing an effective communication stream to

<sup>4</sup> Connect Program Case Study <https://waypointbuilding.com/download-connect-building-case-study/>

property managers and building engineers once buildings are enrolled into the Connect Program. In a survey distributed to property managers and building engineers following program participation, when asked “Why did you participate in the Connect Program?” the most frequently-selected response was “Portfolio management requested it.” Although other response options included “Improve your property’s energy performance,” and, “The possibility of a free energy audit,” results indicated that the most effective way to engage with building management is to drive initiatives from the top down. To best align with the building management motives, Waypoint strategically utilizes its partnerships with portfolio management firms at the national and regional levels to drive program participation down to the building level. To leverage such valuable support from higher management, Waypoint communicates key metrics and results from a portfolio perspective, such as identifying the lowest-performing buildings portfolio-wide or compiling total energy savings potential for the portfolio.

Property managers and building engineers carry various responsibilities in managing their buildings, most often revolving around tenant satisfaction– which can relegate energy efficiency to a distant afterthought. While many energy efficiency programs require significant involvement from building management staff, Waypoint focuses on mitigating the time capital required from partners enrolled in the Connect Program. To achieve this, Waypoint has made the following adjustments to the Connect Program:

- Pull building energy data directly (and securely) from PG&E, rather than requesting from building management
- Draft concise financial business case summarizing findings and recommendations from audits
- Present findings to building management, outlining next steps for all recommended measures
- Complete incentive applications for building management and answer any questions related to incentive program timelines

### **Ensuring Timely Adoption of Efficiency Measures**

Another challenge that the Connect Program faced was the timely adoption of energy efficiency measures by the participating properties. Regardless of how attractive the business case is for energy efficiency, the CRE segment can be slow to invest in energy projects due to such issues as stakeholder coordination, capital budgeting timing, and property lifecycle stage. Waypoint has identified areas that can help to increase and accelerate the investment process from the decision maker.

One crucial prerequisite to increasing adoption of energy efficiency measures is understanding the decision maker (i.e. the party who will pay for the upgrade). When presenting the findings to building management, Waypoint clearly indicates whom the lease structure will affect, which party benefits from the energy savings, and how that specific party can best move forward with the energy project.

Understanding the capital budgeting cycle is crucial in obtaining timely commitments from building management for energy efficiency projects. Most building capital budgets are planned in August or September for the following year. Waypoint strives to conduct audits in the first and second quarter of a given calendar year to ensure that all recommendations can be planned into the capital budget for the following year.

Understanding the property lifecycle is another important component for increasing the adoption of energy efficiency measures. Because the lifecycle can be as short as 2-5 years, building owners are most likely to invest in energy efficiency projects early on in the cycle when

investments will still pay off before the disposition phase. Waypoint establishes regular communication channels with its CRE partners in order to track property lifecycles and target those buildings which are early on in the cycle.

## The Path Forward

Overall, the Connect Program constitutes a scalable and replicable model for utility efficiency programs across the country. Going forward, the program's initial focus will be to secure CRE partner firms and engage them in establishing long term utility relationships. Upon successfully engaging portfolios of CRE properties, the program can then focus on targeting the properties with the highest opportunity for efficiency via in-person energy audits, tailored business cases, and incentive application processing support. With a substantial long-term pipeline of energy efficiency measures already identified, the PG&E Connect Program's core objective will begin to shift toward driving measured and verified energy savings. Waypoint has explored multiple strategies to accomplish this Connect Program objective at the portfolio level, including:

- Targeting energy efficiency in tenant spaces by identifying PG&E incentives that can offset costs in upcoming tenant improvement projects
- Integrating the efficiency measure pipeline with PG&E's customer relationship management (CRM) platform to systematically track new additions to partner portfolios
- Delivering future energy audits to property managers months prior to the August and September capital budgeting deadline season
- Expanding incentive processing support to non-targeted buildings opportunistically in the appropriate stages of the property lifecycle
- Empowering property managers with revised business cases for identified measures that include updated historical energy data and updated PG&E incentive calculations
- Strategically expanding the CRE partnership model beyond property management functions to include project management teams motivated to implement energy efficiency projects across the portfolio

While the Connect Program has a heightened focus on incentive application processing and guiding implementation of projects, it is crucial to acknowledge the importance of continuing to identify new CRE partner portfolios and, accordingly, new recommended efficiency projects to expand upon the current pipeline of measures. As such, while Waypoint will continue to scale the Connect Program by bringing on new CRE partners, it will do so with a balanced focus of driving energy efficiency with the current pipeline of efficiency measures.

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