

Winning with Incentives

Where is the money?

BY MARK T. JEWELL

Energy efficiency and renewable energy (EE/RE) can help lower energy bills, reduce demand on strained utility grids, postpone the need to build more power plants, reduce reliance on foreign oil, and decrease atmospheric pollution caused by burning fossil fuels to create electricity. Reducing demand on the grid is less expensive and more environmentally friendly than increasing supply, so utilities and other agencies continue to provide financial incentives to help make EE/RE projects attractive value propositions.

That said, today's incentive applicant faces greater competition for available funding and more stringent eligibility requirements. Simply knowing when and where dollars are available is no longer enough. Collecting the maximum incentives available requires a more systematic approach, one that compares each energy-related project with available funding opportunities, adjusting project specifications and timeline where incremental incentive dollars (and operating savings) justify the change.

Rebates Rebound

Incentive programs date back to the late 1970s. They became more significant in the 1980s in the wake of oil crises that created significant increases in U.S. energy cost. Funding levels peaked around 1993 and declined precipitously for the next several

... today's incentive applicant faces greater competition for available funding and more stringent eligibility requirements.

years as utilities began focusing on becoming more competitive in the new era of deregulation.

According to Bill Prindle, Deputy Director of the American Council for an Energy-Efficient Economy (ACEEE), 2004 funding levels were about 28% lower than their 1993 peak. On the brighter side, total state and utility funding in 2003 reached \$1.4 billion, up from \$1.1 billion in 2000, a 27% increase.

Today, funding levels and program requirements vary widely across the country. Aside from federal programs, most of the action occurs in fewer than 30 states. Many of the largest programs can be found along the East and West Coasts. In the Northeast, available funding is actually higher than it was in 1993. California's funding has been level for the last several years but is about to rise significantly; both energy efficiency and renewable energy sources have become high priorities

given recent energy crises there. Funding increases are also on the way in New York, and new activity can be seen in other states, including Texas, Arizona and Oregon. In the Southeast and Midwest, many states have very limited offerings, while some (e.g., Florida and Wisconsin) spend millions each year supporting efficiency.

As more states adopt "renewable portfolio standards" that mandate how much generation capacity must be provided by renewable sources, additional incentives for both those sources and conservation should follow.

Information on incentives can be found online by scanning the websites of funding sources or

selected compilations of incentives. Of course, the usefulness of online searching is limited by frequent changes in funding availability, unpublished idiosyncrasies in program implementation, and the fact that many funding sources remain "under the radar." There is no substitute for years of in-depth research, filing experience, and long-standing relationships with funding sources. This is especially true for projects that span multiple filing territories, and for measures that are beyond typical prescriptive categories.

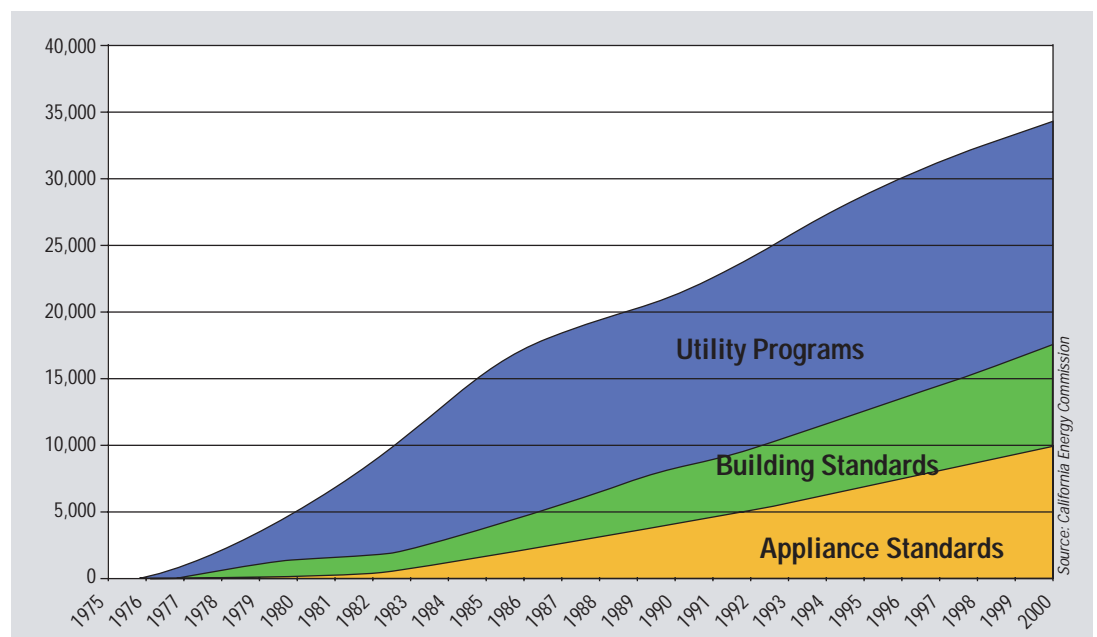
Each month, *Energy and Power Management's* Rebate Report (see page 21) features data excerpted from the Financial

Incentives National Database (F.I.N.D.), one of the most complete and up-to-date listings of energy-related incentives nationally. Expanded versions of those reports are available online at www.realwinwin.com.

Communication Pays!

Maximizing collected incentives requires the attention and cooperation of both internal and external stakeholders. Internal and external stakeholders alike must be informed about these issues in order to meet deadlines and provide proper documentation.

- When are funding opportunities opening and closing?
- Which programs provide the



Utility programs, building standards, and appliance standards are all important to California's energy savings plan. Utility programs have had the greatest impact on a gigawatt-hour basis.

13 Tips for Success:

1. Knowing who is eligible. Most programs are designed to pay the incentive to the party whose name appears on the utility bill. What if a retailer hires a 3rd-party developer to build a store that contains rebate-eligible systems, yet the temporary electric meter is in the developer's name instead of the owner's? In cases such as these, an affidavit explaining the situation should be prepared, signed by all parties, and submitted along with the incentive application. The funding source needs to know who should receive the incentive and why, and that no party will be challenging that allocation later. Construction documents should also specify that all third parties must cooperate with the owner or owner's agent in obtaining any available incentives.

2. Avoiding undisclosed incentives. In certain jurisdictions, third parties can apply for incentives related to a project without informing the building owner. By understanding which programs are available to any stakeholder involved in the project, the owner can assure that any monies received by the contractor, architect, manufacturer, distributor, etc. are taken into account when negotiating the overall price of the project.

3. Comparing programs to maximize incentives. In rare cases, a project can file under more than one program and collect multiple incentives. Much more common is the case where a project has the choice of which single incentive to pursue. For example, choosing a program that requires Measurement and Verification (M&V) could earn an incentive that is many times larger than one that uses a "deemed savings" approach.

4. Investing engineering expertise upfront. Simply designing "to code" does not typically maximize either energy efficiency or rebate eligibility. Sometimes, small changes to construction specs can not only enhance rebate eligibility but also reduce life-cycle cost. In some jurisdictions, the cost of this upfront engineering itself can be subsidized! On a related note, many funding sources have "custom programs" that provide incentives for measures that are not addressed elsewhere in their offerings. A well-documented explanation of how a proposed measure will produce reliable and persistent savings can help get an unconventional application approved.

5. Specifying proper configuration. Some programs take a "prescriptive" approach, paying a certain amount per qualifying component. Others take a "performance" approach, paying only if

the installed system exceeds an efficiency standard. Incentive eligibility must be evaluated holistically. For example, if highly efficient lighting equipment is improperly spaced, the resulting unit power density could exceed a rebate program's maximum watts per square foot, making the project ineligible for incentive.

6. Ensuring specs remain rebate-eligible. Even short construction projects can span multiple incentive program years. Since rebate eligibility tends to get more stringent as programs roll over, requirements can change between the time equipment is specified and the time it is actually purchased and installed. For example, California recently increased minimum lumen output requirements for certain qualifying lamps. By the time some projects are built, the installed lamps will no longer qualify for the incentive.

7. Fine-tuning specifications. Many construction specs include language that allows bidders to substitute "equivalent" equipment when necessary. Provisions such as these should be carefully worded to prohibit substitutions that reduce efficiency. For example, substituting a 20-ton HVAC unit that is similarly sized but less efficient could cost the owner to lose the incentive but also to suffer the higher operating costs of the less-efficient machine as well as the loss of any deposit that accompanied the initial incentive application. Establishing national account relationships with vendors who commit to enforcing efficiency requirements on any equipment purchased in connection with the owner's projects would help prevent such mishaps.

8. Verifying accurate filing input by third parties. Some incentive applications rely on input from the owner's A&E team to verify that a specified system meets eligibility requirements. By design, incentives are paid to motivate a level of performance above what is required by local building codes. For example, utilities in California define incentive eligibility using performance criteria that exceed Title 24 standards. In many cases the utility requests that the A&E team provide a description of the installed equipment as part of the rebate filing. Misunderstanding the purpose of the request, the A&E team might simply forward a copy of the same forms used to document Title 24 compliance even though the installed equipment actually exceeded that standard. The utility would reject the application, causing the owner to lose the incentive unnecessarily.

9. Filing as early as possible. Some incentive programs remain open all year. A few roll over each year with little change to filing requirements or funding levels. Others programs are very dynamic. For example, one incentive program in the Southwest saw its entire 2005 funding cycle fully subscribed within four hours of opening! Virtually any program can experience a sudden loss of available funding if several large projects simultaneously file to reserve funds. Also, since not all programs follow the calendar year, it pays to know when each program opens and closes, and whether a waiting list will be maintained once the initial funding amount has been fully reserved.

10. Documenting changes. Many programs require that they be advised of projects prior to commencement in order to reserve funds and/or schedule pre-construction inspections verifying the quantity and efficiency of the old equipment. In a case where an accelerated construction schedule makes it difficult to perform the pre-construction inspection, the utility might agree to visit the site during (or even after) demolition provided that at least some of the old equipment is preserved for inspection. It is important to document any such accommodation in real time, because if the utility changes its mind after the demolition has ended, the incentive is permanently lost.

11. Connecting purchases with incentive approvals. Programs that pay incentives to influence equipment selection typically stipulate that equipment cannot be purchased prior to incentive approval. After all, if the equipment were purchased before approval, it would be hard to maintain that the incentive was influential in selecting the equipment, right? Unfortunately, although this is not necessarily the case, the burden of

proof is on the applicant. In fact, large users of equipment are often required to place orders well in advance in order to accommodate aggressive construction schedules. In these cases, there is no substitute for excellent communication with funding sources. By engaging the utility in the earliest stages of construction planning, the necessary connection between the incentive and the decision-making can be supported.

12. Monitoring the M&V process. Sometimes more generous incentive amounts are available to projects that document baseline consumption and actual savings over time. Large HVAC replacements, for example, must have their pre- and post-installation loads verified under specific seasonal conditions. It is imperative that the monitoring points be carefully planned (and agreed upon with the incentive-granting agency) before said monitoring proceeds. Mistakes made in collecting data from the proper points at the proper times, or in analyzing those data, can doom an incentive application.

13. Aligning interests. Some organizations believe they can force their vendors and contractors to provide incentive processing services as a condition of winning bids. Rebate processing is probably not the vendor/contractor's core business either, especially when it comes to performing the technical and operational assessments necessary to maximize incentives for the client. It is a "lose-lose" situation to require a vendor/contractor to absorb the cost of finding incentives, filing rebate paperwork, etc. even though it has neither the experience nor the relationships needed to maximize incentives collected. In most cases, the client would be better served by independently outsourcing this function to a rebate processing firm.

Following the Tips

Following Tip #3 allowed a Houston skyscraper developer to boost its incentive from \$100,000 to over \$400,000 by agreeing to incorporate roughly \$50,000 of M&V into its project.

Following Tip #6 would have gained a national lighting vendor almost \$40,000 in rebates lost when late-2004-compliant lamps were installed in an early-2005 construction project.

Following Tip #7 would have gained a national retailer \$17,000 in rebates and saved over \$49,000 in increased operating costs during the first 10 years of its leases when a contractor substituted less efficient HVAC equipment in two new store construction projects.

Following Tip #10 would have saved a contractor \$70,000 when a verbal agreement with a utility program manager to accept samples of removed lighting ballasts in lieu of a pre-construction walk-through was overturned by that manager's successor two months later.



JCPenney has received “custom incentives” for installing ceramic metal halide lighting, an innovative energy-saving technology not typically covered by prescriptive programs.

most generous subsidies?

- What qualifies as a “custom measure?”
- Can the cost or complexity of M&V be reduced without compromising its integrity?
- Is free design assistance, commissioning or other energy evaluation available?

Internal stakeholders must take care to answer the following kinds of questions:

- Can engineering improve the efficiency of building standards?
- Can the owner/developer conduct “value engineering” exercises without compromising energy-efficiency?

• Can procurement enforce the equipment specs needed to qualify for incentives?

- Can construction provide sufficient advance notice on both new sites and renovations?
- Can maintenance provide data on both planned and emergency replacements of rebate-eli-

Outsourcing both these assessments and rebate collection is often the best approach.

gible equipment?

• Can A/P provide copies of relevant invoices necessary for the filing process?

• Can the CFO pool all incentives received and use them to support other energy-related initiatives?

• Can these and other individuals in the organization record and leverage past filing successes (and failures) to improve future specs and filings?

Vendors and service providers must be constantly aware of changes to incentives:

• What is the most cost-effective level of efficiency for each incentive territory?

• Can efficiency requirements be protected in “or equivalent” specs?

• Can accurate specs/counts be guaranteed during both pre- and post-construction to support smooth filings and site inspections?

• Can all invoicing adhere to proper format/timing to satisfy filing requirements?

• Can equipment purchases be delayed until utility approval is received?

The larger the organization, the more important it is to conduct an assessment of technical and organizational readiness before embarking on a campaign to maximize incentives. The technical assessment examines the organization’s present approach to using and enforcing energy-efficient specs in new construction, renovation and maintenance activities.

The operational assessment examines how the internal and external stakeholders interact, and what systems must be modified to support a well-coordinated pursuit of all eligible incentives. It is particularly important to understand how equipment specifications and construction timelines are developed and changed in the organization and how these activities relate to the timing and filing requirements of typical incentive programs.

Outsourcing both these assessments and rebate collection is often the best approach – especially when the in-house energy-related staff is already fully tasked with construction-related demands, energy procurement, utility bill auditing and the like. The relationships and experience that a savvy filing expert brings to the table should generate incremental incentives and energy savings that far outweigh the cost of outsourcing this function. *e&pm*

About the Author: Bringing the perspective that comes with over 20 years in commercial real estate and 12 years in energy efficiency, **Mark Jewell**, founder and President of RealWinWin (mjewell@realwinwin.com), is a national expert on the role of energy-efficiency economics in commercial real estate. Jewell’s ideas have already been transformed into best practices by many large institutions. RealWinWin (www.realwinwin.com) specializes in helping both income-producing and owner-occupied properties create value with efficiency with tools like Building Triage, NOI Builder, and Rebate Administration.

REPRINTS OF THIS ARTICLE are available by contacting Jill DeVries at devriesj@bnpmedia.com or at 248-244-1726.

