



White Paper

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On-Bill Finance for the Small Business Market

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On-Bill Finance for the Small Business Commercial Market

I. INTRODUCTION

This paper provides a brief overview of the major differences in energy-efficiency retrofit on-bill finance programs for the small business market compared to the residential market. Recommendations for addressing these differences when developing strategies for the small business market are also included, and the Appendix identifies resources and current on-bill finance programs.

II. BACKGROUND

Defining the small business commercial market is a two-step process. The first step is deciding what qualifies as a “commercial” building. Some programs take a broad view of the commercial building market, including hospitals, industrial buildings, large multifamily structures, and even government facilities. For purposes of this brief, commercial buildings will be limited to non-industrial, non-residential, privately-operated buildings.

The second step is to define “small business.” According to the U. S. Small Business Administration, the definition of a small business varies by industry, but is most commonly defined as a company with less than \$7 million in annual revenue.¹

In a 2009 study, 90% of small businesses reported that rising or volatile energy prices had a negative impact on their business, with 28% indicating that the impact had been “significantly negative.” Only 18% reported planning to invest in energy-efficiency improvements in the coming year, but 47% said they would be willing to invest in such improvements with more support (information, technical assistance, grants, rebates, etc.).²

The goal of an on-bill finance program for small businesses is to provide the necessary support for those businesses to invest in energy improvements. There is a growing number of commercial on-bill finance programs intended for that purpose. A quick review of the industry identified 10 such programs. Please see the Appendix for a list of those programs and links to their Websites.

¹ U.S. Small Business Administration (February 2011). *Summary of Size Standards by Industry*. www.sba.gov/content/summary-size-standards-industry.

² National Small Business Association (April 2009). *2009 Energy Survey of Small Business*. www.nsba.biz/docs/09nsba_energy_survey_indd.pdf.

III. KEY DIFFERENCES BETWEEN THE SMALL BUSINESS AND RESIDENTIAL MARKETS

In many ways, the small business and residential markets are similar. The differences that do exist, however, are significant enough to warrant special attention.

1) More Commercial Properties Are Leased – On-bill programs in the residential sector often target single family homes, the majority of which are owner-occupied. In contrast, the commercial market has a much larger proportion of leased properties. In United Illuminating’s commercial program, 60% of the loans have been made to leased property.³ For a small business finance program to be successful, the issues associated with leased properties must be fully understood and addressed.

a) “Split Incentives” – Split incentives exist when the utility bill is paid by the tenant as opposed to the building owner. This arrangement is common in commercial leasing. Normally, the building owner would pay for building improvements, including those associated with energy efficiency. However, if the owner does not pay the utility bill, they would not reap the benefits of the lower utility bill resulting from the energy improvements. Thus, the building owner has little incentive to invest in energy efficiency. Similarly, a tenant has little incentive to invest in permanent improvements to a building they do not own. On-bill finance, by putting both the payment and the savings on the same bill, is the only financing mechanism that can readily address this split incentive problem.

b) Loans versus Tariffs – There are two fundamental types of on-bill finance programs: on-bill loans and on-bill tariffs. In both cases, the obligation to pay for the improvements is initially assigned to the party responsible for paying the utility bill (tenant or building owner).

With a loan, that party remains responsible until the obligation is paid in full, even if the utility bill is transferred to another party (e.g., the responsible owner sells the property, the responsible tenant moves out). If the utility bill is transferred, the responsible party can either pay the obligation in full or continue to make regular payments.

With a tariff, the obligation stays with the utility meter. If the utility bill is transferred to another party, that other party assumes responsibility for the remaining obligation. If the meter is disconnected, the obligation stays in place until the meter is reconnected.

The questions of who pays the utility bill and whether the program relies on loans or tariffs has an important and complex impact on the parties’ concerns, as shown in Table 1 and Table 2.

³ Brown, M. H. (September 2009). *On-Bill Financing: Helping Small Business Reduce Emissions and Energy Use While Improving Profitability*. National Small Business Association.

Table 1. Owner Pays Utilities

	Owner Concerns	Tenant Concerns
Loan	<ul style="list-style-type: none"> • Vacancy – The owner must still make the loan payments even if power is disconnected, and even if the reduced energy savings (due to the reduced energy use) no longer cover the payments. • Change of Use – If a new tenant has different energy needs, the improvements may be of little value, and the energy savings may no longer cover the owner’s loan payments. • Upon Sale – The value added to the property from the improvements may help the owner pay off the loan. 	<ul style="list-style-type: none"> • Inconvenience – Installation of improvements could temporarily interfere with tenant’s operations. • Moving – No concerns.
Tariff	<ul style="list-style-type: none"> • Vacancy – If the meter is disconnected, the tariff gets suspended (but without power, it may be difficult to show the property to prospective tenants, water pipes might freeze, etc.). If power is needed, the owner must temporarily pay the tariff, even if the reduced energy savings (due to the reduced energy use) no longer cover the tariff. • Change of Use – Similar concern as for loan (see above). • Upon Sale – The tariff passes to the buyer along with the energy savings. 	<ul style="list-style-type: none"> • Same concern as for loan (see above).

In this case where the owner pays the utility bill (and is therefore the key decision maker), the owner may have fewer concerns with a tariff than a loan, especially if power to the property can be disconnected during a vacancy, and if the use of the property is unlikely to change significantly with a new tenant. Also in this case, the tenant has little say in the decisions and is unlikely to object unless the installation will disrupt their operations. In fact, if the tenant is having problems with comfort or other energy-related issues, they may even push the owner to act.

Table 2. Tenant Pays Utilities

	Owner Concerns	Tenant Concerns
Loan	<ul style="list-style-type: none"> • Vacancy – No concern; the original tenant remains responsible for the loan. • Change in Use – No concern; the original tenant remains responsible for the loan. • Upon Sale – No concern: while the original tenant remains responsible for the loan, the owner may actually profit from the value added to the property by the improvements. 	<ul style="list-style-type: none"> • Inconvenience – Installation of improvements could temporarily interfere with tenant’s operations. • Moving – If the original tenant moves out, they remain responsible for the loan with no way to use the value added to the property by the improvements to help pay off the loan. Of all the concerns in these two tables, this may be the <u>single biggest obstacle to action.</u>
Tariff	<ul style="list-style-type: none"> • Vacancy – If the meter is disconnected, the tariff is suspended (but with no power, it may be difficult to show the property to prospective tenants, water pipes might freeze, etc.). If power is needed, the owner must temporarily pay the tariff, even if the reduced energy savings (due to the reduced energy use) no longer cover the payments. • Change in Use – A prospective new tenant with different energy needs may be unwilling to assume the tariff obligation, making it more difficult for the owner to fill a vacancy. • Upon Sale – No concern; the tenant remains responsible for the tariff. 	<ul style="list-style-type: none"> • Inconvenience – Same concern as for loan (see above). • Moving – No concern, since the departing tenant is no longer responsible for the tariff.

When the tenant pays the utility bill and is the key decision maker, they will have a strong preference for a tariff. In fact, a loan may be unacceptable to a tenant, especially if they are concerned that they might move before the loan is paid off.

The owner in this case also has a say, since any improvements are likely to require their approval. While the owner might prefer a loan-based program, a tariff may also be acceptable, especially if power to the property can be disconnected during a vacancy and if the use of the property is unlikely to change significantly with a new tenant.

Regardless of who pays the utility bill, one of the parties may have some concerns about changes that could occur (vacancies, moving, etc.) during the term of the loan or tariff. This concern may explain why lighting, with its relatively quick payback, is the improvement most frequently chosen in the commercial market.

Recognizing that the small business market has a mix of properties where either the owner or tenant pays the utilities, a tariff-based program would more often minimize the parties' concerns, especially if power can be disconnected during a vacancy and if the property use is unlikely to change significantly from one occupant to the next.

c) Multiple Parties – In most cases, a tenant that wants to make energy improvements needs to obtain approval from the property owner. Conversely, if an owner wants to make improvements, the tenant has the right to unhindered use of their space. In either case, one party must get approval from the other party, which can create an obstacle. This situation can be even more complicated with multi-tenant properties, such as a shopping center.

2) Improvements – Unlike the residential market, where insulation and weatherproofing are the most common improvements, the most common improvement in commercial buildings is lighting, which can also be the largest source of energy use. In United Illuminating's commercial program, lighting represents 75% of program improvements.⁴ As noted above, the reason may be due to the relatively quick payback for lighting improvements and the potential reluctance of landlords and tenants to assume long-term obligations.

Tenants are especially limited in their ability to install upgrades that would require significant changes to core building systems or the building envelope. Conversely, landlords may be reluctant to make improvements that might not be appropriate or valued by the next occupant. For example, a retail store may install lighting that is too bright for a restaurant.

3) Existing Lender's Approval – Many small businesses already have existing loans. Most business loans carry a provision requiring the lender's approval before the business can take on additional debt. While the lender cannot withhold approval unreasonably, this does create another step in the process and another potential obstacle for the business owner. No similar issue exists in the residential sector, where homeowners may take out a car loan, for example, without consulting their mortgage holder.

⁴ Brown, M. H. (September 2009). *On-Bill Financing: Helping Small Business Reduce Emissions and Energy Use While Improving Profitability*. National Small Business Association.

- 4) Loan Security** – Lending to small businesses can be risky; 30% of new employer firms fail within two years.⁵ As a result, it is not uncommon for a lender to ask a business owner to personally guarantee the loan; that is, to pledge their personal assets beyond those of the business. This request for a personal loan guarantee may be negotiable and can become a sticking point in the loan process. This may be a particularly relevant issue if an on-bill program is working with private lenders or with a third-party provider of capital. In contrast, residential borrowers are rarely asked to provide security beyond the asset being financed.
- 5) Utility Disconnect** - Using utility disconnect as a form of loan security has different implications in the commercial realm. Disconnecting power from a commercial customer can literally put people out of work, which is bad for business, bad for the economy, and can lead to negative press for the utility. In comparison, the impact of a residential disconnect is normally not as far-reaching. Also, many states have energy outreach programs specifically designed to act as a safety net for homeowner's who struggle to make their utility payments. Businesses do not have a comparable safety net.
- 6) Motivation** – In the residential market, comfort (or the lack thereof) is the leading factor that drives homeowners to make energy improvements. Saving money is typically a secondary consideration.⁶ In the commercial sector, saving money is normally more important than comfort.

In one study, 52% of small business owners reported that cash flow is the main obstacle to making their business more energy efficient. These owners clearly assumed that energy improvements would have a negative impact on their near-term cash flow.⁷ Small businesses are notoriously strapped for cash. Any energy investment that makes sense for a small business will be cash flow positive (or at least cash flow neutral). The savings on the utility bill will have to equal or exceed the financing payment, which may have a significant impact on how many and what types of upgrades can be installed.

Marketing considerations may also influence the commercial sector. Many companies want to position themselves as “green,” and an investment in energy efficiency may have value beyond the savings from the improvements themselves.

⁵ U.S. Small Business Administration, Office of Advocacy (February 2011). *Frequently Asked Questions*. www.sba.gov/advocacy/7495.

⁶ Fuller, M., Kunkel, C., Zimring, M., Hoffman, I., Soroye, K.L., and Goldman, C. (September 2010). *Driving Demand for Home Energy Improvements*. Lawrence Berkeley National Laboratory. <http://drivingdemand.lbl.gov>

⁷ National Small Business Association (April 2009). *2009 Energy Survey of Small Business*. www.nsba.biz/docs/09nsba_energy_survey_indd.pdf.

- 7) **Market Segmentation** – In the residential market, segmentation is often based on factors such as specific geographic areas or the adoption lifecycle (e.g., early adopters). For small businesses, the marketing approach for offices might be very different than the best approach for other facilities, such as restaurants. The variety of different property uses, and the need to tailor the marketing to those uses, is a significant difference from the residential market.
- 8) **Utility Rates** – Small business customers typically pay a different rate for electricity and gas than residential customers. Lower business rates, as is often the case, can make it more difficult for small business owners to justify energy-efficiency improvements on the basis of cash flow, their primary motivator. Consequently, it may be more difficult to replicate the success of a residential program in the small business market.

IV. RECOMMENDATIONS TO ADDRESS SMALL BUSINESS CONCERNS

The following recommendations respond to the issues identified above for on-bill finance in the small business commercial sector.

1) Address the Issues Associated With Leased Properties

- a. **Deal With Split Incentives Directly** – Even though on-bill financing can overcome the split incentive barrier, this benefit may not be intuitively obvious to tenants and landlords. Marketing to leased properties should be customized to tackle this issue in a positive fashion, rather than waiting for the objection to be raised.
- b. **Decide on Loans versus Tariffs, and Market Accordingly** – The issues of a loan versus a tariff are largely similar for both the small business and residential markets. For instance, the ability to transfer a tariff at resale is a major plus in both markets. However, this feature is especially useful in the small business market due to the higher proportion and importance of leased properties.

With leased commercial properties, the potential concerns and motivations of the landlord and tenant can be very different, and can change entirely depending on whether the program offers loans or tariffs (see Table 1 and Table 2). Marketing to owners and tenants needs to be customized to address the specific concerns and needs of the parties and the situation. Focusing on improvements with quick paybacks, such as lighting, insulation, and weather sealing, may be necessary in many cases.

c. Make it Easy for Multiple Parties to Agree – With leased properties, the need to gain approval from both the landlord and the tenant(s) complicates matters significantly. The auditor who is capable of guiding a homeowner through the residential process may be ill-equipped to facilitate agreement between a landlord and tenant(s). Special training is required, along with customized sales collateral including sample agreements. It may be appropriate to develop a special team of auditors and installers to focus on leased properties. To avoid unnecessary tenant disturbance, it may help to suggest that energy improvements be made as part of scheduled maintenance/repairs.

2) Accept That Lighting may be the Most Common Measure – In the residential market, a comprehensive retrofit program that only persuaded people to change their light bulbs would probably not be considered a success. In the small business market, however, lighting can be the largest use of energy, and facilitating a major lighting retrofit can save a significant amount of energy. While an effort should be made to market more extensive improvements, it will be important to accept what is realistic.

3) Account for Needing an Existing Lender's Approval – The loan origination process needs to make it easy for commercial applicants to get approval from their existing lender. This might include a letter that explains the program, as well as a standard form that makes it easy for the lender to give approval. The on-bill program should also have a procedure that ensures approval has, in fact, been granted.

4) Discuss the Need for Personal Guarantees – If on-bill loans are being made through one or more private lenders, negotiations with the lender(s) should address whether small business applicants will need to give personal guarantees. The added security inherent in an on-bill program, especially if there is a disconnect provision, may be enough to eliminate this often contentious requirement for many applicants. On the other hand, it may be counterproductive to make risky loans, which increases the losses and drives up the interest rate for all participants.

5) Decide on Disconnect Policy – There are pros and cons to exercising a disconnect option, as discussed previously. In general, a disconnect provision enhances loan security significantly, which can lead to broader eligibility and lower interest rates for all participants. In addition, since the energy savings may cover all or most of the finance payments, participants who have trouble paying their utility bill would most likely have had trouble without the improvements.

If the decision is made to authorize disconnection, it may be best to legally require this from the utility so that the decision is out of their hands. If disconnect is optional, utilities may be reluctant to follow through due to negative publicity.

6) Focus on the Financial Benefits – Whereas marketing to homeowners should include an emphasis on the benefit of comfort, marketing to small businesses should focus on cash flow, with a secondary focus on the benefits of going green.

- 7) Segment by Property Use** – In addition to broad marketing to small businesses, consider targeting specific segments such as printers or convenience stores. Needs and opportunities vary considerably from one property use to another, so customized messages are more likely to be effective than a one-size-fits-all approach. Early adoption at a few properties representing a specific property use should be leveraged across all similar properties. Another strategy is to work with associations, such as a state restaurant association, to identify test properties that will spread the word among their members.
- 8) Check Utility Rates First** – The cost of energy for small businesses may be significantly lower than for the residential market, affecting the success of a program. Expectations for program size and the depth of improvements may need to be adjusted accordingly. Consider whether the economics exist to support a program.

V. APPENDIX

The table on the following page lists major on-bill finance programs in the first column. The next three columns identify the program's sector, active status, and type of program (tariff or loan). The remaining columns identify various reports which discuss the programs listed along the first column. Following the table is a list of each of the resources and programs in the table and a link to the applicable Website.

APPENDIX	Commercial/Residential/Municipal	Active (Yes/No)	Tariff/Loan	SOURCES/REPORTS	Alliance to Save Energy ²²	American Council for an Energy-Efficient Economy ²³	Southwest Energy Efficiency Program ²⁴	CaICEF Innovations ²⁵	National Small Business Assoc ²⁶	Environmental Manager's Compliance Adviser ²⁷	Center for Energy, Marine Transportation & Public Policy ²⁸	CA Emerging Technologies Summit ²⁹	CIEE and Efficiency Vermont ³⁰	IEPEC ³¹
	ON-BILL PROGRAMS				+ Not Much Detail	++ Some Detail	+++ More Detail							
SDG&E ¹ /SoCalGas ² - CA	C	Y	L				+++	+++	+++	+				
SCE ³ - CA	C	Y	L		+									
PG&E ⁴ - CA	C	Y	L									+++		
SMUD ⁵ - CA	R	Y	L										++	
HEC/HELC/MEC ⁶ - HI	R	N	T		+									++
PacificCorp ⁷ - Western US	C	N	T		+									
Portland GE/PP/NN ⁸ - OR	R	Y	L					+++						
Manitoba Hydro ⁹ - Canada	R	Y	L				+++						++	
Midwest Energy ¹⁰ - KS	R	Y	T		+		+++						++	++
First Electric ¹¹ - AR	R	Y	L		+								++	
Cherryland ¹² - MI	R	N	L											
Dixie ¹³ - AL	R	Y	L		+									
PSE&G ¹⁴ - NJ	C	Y	L											
NYPA ¹⁵ - NY	M	Y	L											
United Illuminating ¹⁶ - CT	C	Y	L		+++	+++	+++		+++	+	+++			
CL&P ¹⁷ - CT	C	Y	L		+	+++				+				
National Grid ¹⁸ - MA, NH, RI	C	Y	L		+					+				
WMECO ¹⁹ - MA	C	Y	L		+	+++								
PSNH ²⁰ - NH	M	Y	T		++									
NHEC ²¹ - NH	C	Y	T		++									

On-Bill Programs and their website addresses

- ¹ San Diego Gas and Electric. www.sdge.com/business/rebatesincentives/programs/onbillfinancing.shtml.
- ² Southern California Gas Company. www.socalgas.com/business/rebates/onBillFinancing.html.
- ³ Southern California Edison. www.sce.com/business/onbill/on-bill-financing.htm.
- ⁴ Pacific Gas and Electric. <http://pge.com/mybusiness/energysavingsrebates/smallmediumbusiness/>.
- ⁵ Sacramento Municipal Utility District. www.smud.org/en/residential/home-performance/Pages/financing-FAQ.aspx.

- ⁶ Hawaii Electric Company, Hawaii Electric Light Company, Maui Electric Company, SolarSaver program. www.heco.com/vcmcontent/HELCO/ResidentialServices/SolarSaverBrochure.pdf.
- ⁷ PacificCorp. www.pacificcorp.com/index.html.
- ⁸ Clean Energy Works Portland. www.cleanenergyworksportland.org.
- ⁹ Manitoba Hydro Power, Smart Program. www.hydro.mb.ca/your_home/residential_loan.shtml.
- ¹⁰ Midwest Energy, HowSmart Program. www.mwenergy.com/howsmart.aspx.
- ¹¹ First Electric Cooperative, Home Improvement Loan Program. www.firstelectric.coop/content.cfm?id=2043.
- ¹² Cherryland Electric Cooperative. <http://www3.michigansaves.org/cherrylandpilot>.
- ¹³ Dixie Electric Cooperative, Energy Resources Conservation Loan Program. www.dixieec.com/page_to_print.cfm?id=2049.
- ¹⁴ Public Service Electric and Gas Company. www.pseg.com/business/small_large_business/save_energy/efficiency.jsp.
- ¹⁵ New York Power Authority. www.nypa.gov/services/esprograms.htm.
- ¹⁶ United Illuminating.
www.uinet.com/wps/portal/uinet/business!/ut/p/c5/vZHLkqJAEEW_pT8A6wFFybJCUIs3FCKwMMwzHRkFE0JbH1zczq-6YmJlNx-TdZERG3nMjE2Rg0nX_POf7x7m-7i8gAZm6sz2-chaUMx4HBHKF48ALFwuiKNiCBCo7UQw3PpZjWMDccsGC33TOboxOLAbHeNmRXrsiRLZjyLoRbS0RLEZ0V1D8TIwmFnGnKUvEyy9zBKqMrEMRiPuwHXC_0higuz8Ws26QzWDM6RQRbKoEagSLGM6n4JmXw1-t_85h38oBkEKMvpp39P0aT8KeDCnCFIZRN94iryXPgfWfHbWV-epCGqqURT54SoMplVsM1SrOm10-k8fOuD7ihGWxabWjaQ2ViJEfx4nojUWc37VVBjIpCMbfI84MqTW6jSBsveAV94Lw2w3OwikbA3xMI2840E1u1l7fhC6qvkPW-HMVRYRpvIh3EgtdI9qXfD-VCN2zS_Z0QJmS9V_LQQXVGyPn-wpe2tieLFvntxzaeitqV16pU6F7epsVPNnbNV9Ehe7y_AXdfVEdyqp03M9Zj80pF9AA4fAnM!/dI3/d3/L2dBISEvZ0FBIS9nQSEh/.
- ¹⁷ Connecticut Light and Power. www.cl-p.com/business/saveenergy/services/energyadvantage.aspx.
- ¹⁸ National Grid. www.nationalgridus.com/index.asp.
- ¹⁹ Western Massachusetts Electric Company.
www.wmeco.com/business/saveenergy/energyefficiencyprograms/zerointerestloan.aspx.
- ²⁰ Public Service New Hampshire, Smart Start Program. www.psnh.com/Templates/Content.aspx?id=4294967812.
- ²¹ New Hampshire Electric Cooperative, Smart\$TART Program. www.nhec.com/business_energysolutions_smartstart.php.

Sources/Reports and their website addresses

- ²² Brown, M., ConoverBrown (2008). *Paying for Energy Upgrades Through Utility Bills*. Alliance to Save Energy. <http://www.ma-eeac.org/docs/On-BillFinancingASEBriefMatthewBrown.pdf>.
- ²³ Gandhi, N., Gray, P., O'Conner, D., Vagnini, R., Kiernan, K., Baggett, S. (June 2008). *On-Bill Financing of Small Business Energy-Efficiency: An Evolving Success Story*. American Council for an Energy-Efficient Economy. http://eec.ucdavis.edu/ACEEE/2008/data/papers/5_382.pdf.
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- ²⁸ Hyams, M. (April 2009). *“On-Bill Financing” for Energy Efficiency*. Center for Energy, Marine Transportation and Public Policy. <http://energy.sipa.columbia.edu/researchprograms/urbanenergy/documents/On%20bill%20Financing%20FINAL.pdf>.
- ²⁹ DiGiorgio, B., Pacific Gas & Electric (November 2010). *Pacific Gas and Electric Company, Energy Efficiency Financing*. Emerging Technologies Summit. Not available online.
- ³⁰ Fuller, M. (May 2009). *Enabling Investments in Energy Efficiency*. California Institute for Energy and Environment and Efficiency Vermont. <http://wpui.wisc.edu/files/webcontent/reports/Residential%20Financing%20White%20Paper.pdf>.
- ³¹ Johnson, K., Shimoda, W., Willoughby, G., Volcker, M. (June 2010). *Lessons Learned from the Field: Key Strategies for Implementing Successful On-The-Bill Financing Programs*. International Energy Program Evaluation Conference. www.iepec.org/paris2010/JohnsonPresentation.pdf.
- ³² Michigan Saves Pilot (February 2011). *Cherryland Electric Cooperative*. <http://www3.michigansaves.org/cherrylandpilot/>.