

**On-Bill Financing:
Taking the Sting Out of Going Green**
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What is On-Bill Financing?

On-bill financing is a method of overcoming one of the largest roadblocks people face when trying to reduce their energy consumption – initial cost – by providing low interest or no interest loans for eligible energy efficiency upgrades to qualifying homes and businesses.

Upfront costs are funded by third parties, typically government agencies, utility companies, or private or public grants. Their investment is then recuperated over time through a surcharge added to the property's utility bills. Eligible improvements can encompass a wide range of green technology, from simple weatherization techniques like installing insulation and replacing windows, to more elaborate solutions such as solar panels. Businesses may even apply funding toward certain industry-specific equipment, such as high-efficiency fryers, steamers and ovens, waste water heat recovery systems, and Ozone laundry systems.¹

The improvements are often financed entirely with 0% interest, unsecured loans, meaning little or no cost to the consumer. Comprehensive weatherization plans can often reduce energy use by as much as 20-30%, which benefits not only the environment, but consumers as well, who enjoy immediate savings through lower energy bills.

What are some advantages and disadvantages of on-bill financing?

The primary goal of on-bill financing is making energy efficiency affordable. “The number one reason small-business owners cite for their inability to make their firms more energy efficient is cash-flow,” states Keith Ashmus, National Small Business Association (NSBA) chairperson.² “Programs such as on-bill financing can eliminate this very significant barrier many small businesses simply can’t overcome.”³ On-bill financing “obliterates that old paradigm that environmental conservation is anathema to economic growth,” says NSBA President



Todd McCracken. “Quite simply, small businesses can increase their profitability while reducing their carbon footprint.”⁴

For consumers, the biggest benefit is lower utility bills. According to the NSBA, energy-efficiency programs covered by on-bill financing can save the average small business \$4,932 or more annually in energy bills.⁵ Not only do customers typically benefit immediately through savings on their monthly bills,

but once the loans are repaid, 100% of the savings go to the consumer.

Most eligible upgrades have a maximum payback period of 10 years or less. This means that within 10 years, the savings will outweigh the cost of the improvements. Even less cost effective approaches like solar typically demonstrate a cost benefit in this period. For example, a solar hot water heater costs around \$2,500, but saves \$303 per year, paying for itself in about seven and a half years.⁶ More cost-effective methods like weatherization yield even faster returns.

Heating and cooling account for 50-70% of energy use in an average American home, and monthly gas bills can easily reach \$300.00 or more during cold Buffalo winters. If efficiency improvements of 20-30% can be achieved, the savings would be substantial. In addition, homes account for

21% of energy consumption and 17% of greenhouse gases⁷, so significant environmental benefits are possible as well.

The advantage of on-bill financing over traditional weatherization programs is that the money is gradually repaid to the fund, where it can then be recycled and applied to new improvement projects. This allows the funding to be used for more upgrades, maximizing its value and magnifying its impact. Ideally, this creates a highly efficient cycle of energy-saving improvement capital.



On-bill financing can provide other economic benefits as well.

Aside from reducing energy consumption and reducing utility bills, it also stimulates the local economy by bringing in and circulating money within the region. It generates jobs for skilled workers, such as contractors, installers and administrative staff. Green Jobs/Green NY, a financing plan with \$112 million in funding, expects to create more than 14,000 permanent skilled labor jobs.⁸ In addition, green legislation can have a positive impact on an area's image and reputation. Property executed, on-bill financing can be a true "green light" for regional economic growth.

However, several concerns may arise. First, well-planned infrastructure is a must. Before a single dollar can be applied to upgrades, administrative and billing systems must be in place. The Seattle Green Building Task Force estimated such a program to cost between \$1-10 million, and require 3-5 years of preparation.⁹ In their study, the Task Force considered this a substantial expense that would take time to recover though the gradual income from on-bill surcharges. This led them to instead consider using an add-on to property taxes, which it felt more feasible due to the lower costs of implementation (although the property tax method, sometimes known as PACE, has encountered roadblocks of its own, with Fannie Mae and Freddie Mac refusing to buy mortgages on PACE-assessed properties).¹⁰

Beyond initial implementation, other administrative issues may arise as well. One concern is whether the utility companies can legally disconnect service if a customer pays for its energy but not for the repayment on its loan. Further, when customers only partially pay their bills, repayment allocation (who gets paid first) becomes a major concern. If third-party

financing is used, the gas or electric bill is paid first, increasing the risk to the lender and making them hesitant to participate. This concern was a deal-breaker for NW Natural Gas in Oregon, effectively ending its on-bill program.¹¹

How do they collect the money from the utilities?



Repayment is the key to on-bill financing. On-bill financing makes repayment easy because it happens automatically, with no new bills to pay. It is also painless to the consumer because the savings typically cover the entire cost of the loan, resulting in no increase in the consumer's utility bill.

There are two common repayment approaches for on-bill financing: loans and tariffs. The loan option works like a typical loan. The customer is personally responsible for paying it back according to the terms, regardless of whether they remain in the home until the end of the payment period or not. The tariff

approach, on the other hand, links the charge to the meter, which means that the occupant of the house, whoever that may be, is responsible for the payment, so if the original customer moves, the new occupant continues payment.¹²

How can on-bill financing benefit lower-income residents?

The main goal of on-bill financing is to remove roadblock of expense that keeps many customers, both owners and renters, from upgrading their home energy systems. For many, particularly lower-income residents, these improvements would be simply impossible without financial assistance.

Eric Walker, Organizing Director of the People United for Sustainable Housing (PUSH) says, "As a community group that organizes with low and moderate income Buffalo residents, PUSH is extremely excited about the opportunities that Green Jobs/Green NY will offer to job seekers and homeowners. On bill recovery is a crucial piece of this program – it will make retrofits much more accessible to homeowners who can't qualify for regular loans."¹³

Many lower-income owners and renters stand to achieve substantial energy savings, as they are often forced by their financial constraints to

live in aged and neglected housing stock, where old windows, obsolete heating systems, poor insulation and leaky roofs can lead to staggering utility bills. This scenario is far too common with rental property. Since renters typically pay their own utility bills, there is no financial incentive for landlords to invest in efficiency upgrades. Even if lower-income renters could afford to make the improvements themselves, it would make little economic sense to invest in property in which they have no ownership interest.

Programs such as Green Jobs-Green New York can also stimulate the job market, alleviating the burden of unemployment which disproportionately affects lower-income residents. Dave Johnson, Director of the Laborers' Eastern Region Organizing



Fund said, "Through community, labor and employer partnerships, Green Jobs-Green New York will create true pathways out of poverty for thousands of New Yorkers by connecting them to high quality training and career ladder jobs that pay a family supporting wage at a time when jobs are all too hard to find. On-bill recovery ensures that it is a sustainable, long term program which will benefit homeowners and working families for years to come. This is a case of what is good for the environment and homeowners being good for working families."¹⁴

On-bill financing programs can also be tailored specifically to target lower income families, directing assistance to where it is needed most. This can be achieved by creating several tiers of assistance based on need, and offering applicants who fall below certain income limits to qualify for the most favorable packages. For example, tiers could be created providing 50%, 75% or 100% of the upgrade cost depending on the applicant's financial need. Other terms could follow such a sliding scale as well, such as interest rates or maximum loan amounts. ShoreBank Enterprise Cascadia, based in Oregon, has utilized such sliding scales, offering interest rates of 2%, 4% and 6% based on income to provide the most favorable benefits to their lowest-income customers.¹⁵

Several programs have made special efforts to assist low-income customers and those with poor credit histories. For example, Vermont Gas and Efficiency Vermont first direct customers with less than 60% of the

area median income (AMI) to Vermont's free low-income weatherization program. Customers above 60% AMI are directed to apply for a loan, which Vermont Gas guarantees. Almost 100% of applicants have been accepted due to this guarantee.¹⁶ NYSERDA also assists low-income customers with a direct subsidy, paying for 50% of the upgrade cost, up to \$5,000.¹⁷

However, implementing on-bill financing does raise several concerns in the interest of low-income residents. While these programs help to lower overall costs significantly, they do not remove the cost barrier entirely, and even a small upfront cost can be a significant obstacle for low-income



customers. Further, because utilities must recuperate any losses from their customer base somehow, all rate-payers will ultimately be responsible for any losses that ensue if a customer does not repay their debt. This raises concern that if on-bill financing is not implemented carefully, it could effectively create a regressive tax which would have a disproportionately damaging effect on low-income households. This is a reality of lending institutions, so it is understandable to anticipate similar effects with on-bill financing if it is paid for directly by utility companies. Luckily, the rate of default on utility bills is typically very low- no one wants

their lights or heat shut off, after all- so these particular costs should be quite negligible.

How has on-bill financing been done before?

On-Bill Financing has been implemented in about a dozen states, but California is currently the epicenter of on-bill financing, with several major energy suppliers in the state implementing programs.

Southern California Edison is currently advertising on-bill financing to its business customers, offering 0% interest loans, free of additional fees or loan costs, to any business who has been a customer for at least two years, and whose account has been in good standing for at least one year. The program offers businesses up to \$100,000 and a 5 year repayment term, and for government and institutional entities those figures increase to \$250,000 and a 10 year repayment, respectively.¹⁸

Pacific Gas & Electric, one of the nation's largest utility providers, has joined in by allocating \$20 million in 0% loans to businesses in western



California. Their program is not new, but has been under-utilized, and the investment is meant to reaffirm their commitment.¹⁹

San Diego Gas & Electric has also instituted an on-bill program, and among their success stories is the recently completed efficiency overhaul of the entire Solana Beach School District. By replacing 4,000 light fixtures, updating sprinkler systems, and installing automated control systems in each of the district's 6 schools, the school board plans to save \$113,700 per year.²⁰ SDG&E also worked with Radisson Suites, which used on-bill financing offset the cost of premium-efficiency Packaged Terminal Air Conditioner (PTAC) units for 153 guest rooms, saving \$334 per month in energy bills.²¹

Other plans have been implemented to varying degrees of success by Midwest Energy, National Grid (New England), Milwaukee Energy Efficiency NSTAR (Eastern Massachusetts), and the Sacramento Municipal Utility District.²² In October 2009, the Green Justice Coalition scored an important victory by getting environmental justice language inserted into Massachusetts's new, \$1.4 billion energy efficiency plan, one of the first comprehensive plans in the nation. Plans similar to the one in Massachusetts are also under way in California and Connecticut as well.²³

Several lessons can be learned from examining these existing projects. Taking care to ensure proper administration and infrastructure from the onset is vital to the success of any on-bill financing program. If these concerns are addressed and such a plan is properly created, the results are typically very positive- substantial energy savings, cost reduction sufficient not only to cover the upgrades but to be passed on to consumers as well, and very low levels of default on the loans. They can also have significant benefits for lower-income residents if care is taken to structure the program with such goals in mind.

Has on-bill financing gained traction in Western New York?

Buffalo is an area with limited financial resources, so on-bill financing must be a smart economic decision first and foremost. Implementation must not only be cost-efficient, but it should clearly demonstrate a cost

benefit to our economy. Before it is possible, however, it must first gain the support of both lawmakers and the community.

Several groups like PUSH and the Center for Working Families have already been trying to make on-bill financing a reality in Western New York. PUSH is applying pressure to National Fuel to stop resisting on-bill financing in the region. The New York state senate passed on bill-financing legislation allowing customers to pay for weatherizing their homes



with savings from their bills through the Green Jobs/Green New York program. However, the legislation still must pass the state assembly before it officially becomes law. Supporters say it could create as many as 60,000 jobs and save over \$1 billion on heating bills.²⁴

Properly implemented, on-bill financing in Western New York could save energy, provide low-income families relief from crippling utility bills, and stimulate our struggling economy. It would also help Buffalo to shake off its Rust Belt image and establish itself as a progressive city with green aspirations.

¹ “Zero Percent On-Bill Financing” pamphlet, at <http://www.socalgas.com/business/rebates/onBillFinancing.html>

² A September 16, 2009 report by the National Small Business Association, found at: <http://consumerenergyalliance.org/2009/09/nsba-report-shows-on-bill-financing-improves-energy-efficiency/>

³ Id.

⁴ Id.

⁵ Id.

⁶ From “Greening Buffalo,” see Rocky Mountain Institute, Home Energy Brief #5, available at <http://www.rmi.org>

⁸ See <http://www.hud.gov/utilities>

⁸ “New On-Bill Financing Legislation Will Create Jobs, Reduce Energy Costs And Help Homeowners Afford Weatherization,” Posted by Majority Press on Friday, April 23rd, 2010 at: <http://www.nysenate.gov/print/48756>

¹⁰ Id.

¹¹ Id.

¹¹ http://www.cityofseattle.net/environment/documents/GBTF_EB-Policy-Finance&Incentives.pdf

¹³ See <http://www.greenerdawn.com>

¹³ “New On-Bill Financing Legislation Will Create Jobs, Reduce Energy Costs And Help Homeowners Afford Weatherization,” Posted by Majority Press on Friday, April 23rd, 2010 at: <http://www.nysenate.gov/print/48756>

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¹⁵ “A Tool for the Green-Collar Recovery”, <http://www.grist.org/article/Financing-retrofits-for-all/>

¹⁶ Merrian Fuller, *Enabling Investments in Energy Efficiency: A study of Energy Efficiency Programs that Reduce First-Cost Barriers in the Residential Sector*, UC Berkley (2009).

¹⁷ Id.

¹⁹ http://www.sce.com/NR/rdonlyres/6B2E3A96-321E-4EB3-9B07-F962C17D04B3/0/100816_OBF_FactSheet.pdf

¹⁹ <http://ecopreneurist.com/2010/08/02/california-businesses-get-0-financing-for-efficiency-improvements/>

²⁰ <http://sdge.com/esc>

²¹ Id.

²³ http://www.cityofseattle.net/environment/documents/GBTf_EB-Policy-Finance&Incentives.pdf

²⁴ <http://www.greenerdawn.com>

²⁵ See <http://www.nysenate.gov> for information

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