

Center for Small Business and the Environment
Silver Buckshot Briefing
October 26, 2007

On-Bill Financing:
Making energy efficiency for small businesses as easy as falling off a log

Christopher Lynch
Director
Environmental Management Assistance Program
Pennsylvania Small Business Development Centers
The Wharton School of the University of Pennsylvania
Email: clynch@wharton.upenn.edu
Phone: 215.573.7555

Good morning, my name is Chris Lynch and I am the director of the Environmental Management Assistance Program for the Pennsylvania Small Business Development Centers at the Wharton School of the University of Pennsylvania. I also have the pleasure of serving on the advisory board for the Center for Small Business and the Environment and chair the CSBE's task force on federal policy.

As you are hearing this morning, to meaningfully involve America's 26 million small businesses in the battle against climate change – which we must – there's no silver bullet but the silver buckshot approach can be just as powerful. One key strategy in the silver buckshot arsenal is to improve small business energy efficiency. In the aggregate, small business energy consumption is anything but small; America's small businesses consume an estimated half of the total energy used for commercial and industrial purposes. If we are looking for ways to reduce that consumption for immediate gains in reducing greenhouse gas emissions, energy efficiency offers the greatest potential because these cost-effective technologies already exist, they are well-proven, and can be implemented quickly and easily.

The typical small business can realistically cut energy consumption by 20 to 30 percent – targets we have easily seen with our clients in Pennsylvania and which are also supported by the national experience of U.S. EPA's Energy Star Small Business program. In the aggregate, reducing this energy waste roughly translates to a reduction in carbon dioxide emissions by up to 140 million tons per year and small business savings of up to \$18 billion on annual energy costs.

For widespread adoption of energy efficiency to occur in the small business community, there are three essential elements: outreach and education; technical assistance; and, financial assistance. This morning, I would like to specifically address the financial assistance part of the equation because it is such an important element in this silver buckshot strategy.

Access to up-front capital for financing energy efficiency improvements can be a huge hurdle for small business owners. Fortunately, there is a cost-effective way to involve public

electric utilities in the process through on-bill financing. On-bill financing is a mechanism that makes paying for energy efficiency improvements so simple and effective for small businesses, some would say it becomes as easy as falling off a log.

Specifically, on-bill financing is a utility-based method of providing seamless zero percent financing through the monthly power bill for small business energy efficiency improvements. With on-bill financing, energy efficiency projects are identified through no-cost energy audits and implemented with no up-front capital required of the small business installing a project – the utility pays those costs.

Once the project is completed, however, the small business does not see an immediate reduction in its energy bills but continues to pay its bill at historic levels while the savings from the project are “shared” back with the utility until the loan is repaid. Once the loan is paid off, the business benefits from lower bills as a result of the reduced consumption; and the energy efficiency improvement will have literally paid for itself.

Existing on-bill financing programs have the same following basic components:

- No up-front out-of-pocket costs for the small business – usually a rebate is offered for part of the project and zero percent interest financing is provided for the balance
- Loan repayment is based on estimated energy savings
- Customers pay about the same per month as they did before participating – energy efficiency improvement savings are “shared” with the utility
- Once improvements are paid off, then all savings are reflected in the monthly bills
- Repayment is simplified – since the loan repayment is rolled into the monthly electric bill, it is easy to track and only takes one check (no separate loan payment)
- Permanent and verifiable efficiency improvements are the focus, so long term consumption reductions and savings are provided (project examples include lighting system upgrades, building envelope improvements, commercial appliance and refrigeration system improvements, heating and cooling system upgrades, boiler upgrades, process equipment upgrades, and more efficient motors)
- Utility-approved vendors identify and complete project installations
- Total project costs are typically \$15,000 or less

On-bill financing is not just a theoretical concept; it has been successfully offered through several utilities in Connecticut, Rhode Island, and Massachusetts for over ten years. Because the loans are in fact repaid through the shared savings, loan program operational and administrative costs can be kept fairly low and the revolving nature of the funds allows more small businesses to participate over time.

As expressed by default rates, utility risk can also be kept low. United Illuminating (UI) in Connecticut simply designates a small business as eligible to participate in the program if the business has been a UI customer for at least six months and if all bills have been paid within 60

days. Using just these criteria, UI has lent approximately \$14 million for small business energy efficiency projects since 2000 and has experienced just \$70,000 in defaults over that time period.

In most states, like Connecticut, program operating expenses are borne by the participants through the payment of a public benefits charge levied on their utility bill. Because administrative costs and default rates can be kept low, energy efficiency is being accomplished at very competitive levels. UI expects to save approximately 5.6 million kWh of annual electric consumption on the small business projects receiving on-bill financing this year. When spread out over the ten year expected lifetime of most projects, energy efficiency as a source of energy costs a very competitive \$0.018 per kWh.

Now, on-bill financing is catching on in states outside New England. States such as New York, Oregon, Nevada, and Pennsylvania are also all exploring on-bill financing for small business energy efficiency improvements. Just last month in Pennsylvania, the chairman of the House Committee on Environmental Resources and Energy introduced legislation that would require the Pennsylvania Public Utility Commission to establish on-bill financing at each electric generation supplier operating in the Commonwealth.

But the most exciting developments are currently occurring in California. In 2006, on-bill financing pilot programs were launched by Southern California Edison, Southern California Gas, and San Diego Gas and Electric. As of October 7, 2007, over \$900,000 in on-bill financing loans were approved by San Diego Gas and Electric and Southern California Gas.

As a result of official intervention by the Center for Small Business and the Environment, the California Public Utility Commission (CPUC) just last week issued a final interim decision directing these utilities to continue their on-bill financing pilot programs and directing those California utilities without on-bill financing pilot programs to create such programs for small commercial customers. In a further show of how effective the commission thinks such programs could ultimately become, the CPUC also directed utilities to further begin developing proposals for offering on-bill financing programs for institutional customers (i.e., cities, counties, and other taxpayer-funded institutions) beginning in 2009.

There is even reason to be excited at the federal level. Earlier this year, amendments offered by Senators Kerry and Snowe were incorporated into H.R. 6, the CLEAN Energy Act of 2007, to authorize the SBA Administrator to guarantee on-bill financing agreements between small businesses and electric utility companies in order to cover a utility company's risk in entering into such agreements.

On-bill financing for small business energy efficiency improvements is still a little known bit of shot in the silver buckshot approach, but it is rapidly gaining attention. Energy independence and climate change strategies must look more aggressively to energy efficiency as a valuable and reliable energy source in its own right; and the small business community can no longer be ignored if we want to achieve significant and immediate reductions in energy consumption and related greenhouse gas emissions.