

Pay As You Save® (PAYS®)

Policy Leadership Institute

Durham, NH

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Energy Efficiency Institute

Energy-efficiency Economics

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- **Fact #4:** Most customers leave cost-effective energy efficiency measures uninstalled.

Huge Savings Are Left on the Table...

- Consumer barriers to choosing efficiency
 - Lack of information/trust in vendors
 - Lack of access to capital and/or debt
 - Uncertainty about future occupancy
 - Split incentives
 - Landlord/tenant
 - Builder/owner

Market Intervention Strategies

30 years

- Technical assistance
 - Information/energy audits/arranging
- Subsidize customer purchase: lower total measure cost
 - Rebates (ratepayer funded)
 - Tax credits (taxpayer funded)
- Finance customer purchase: reduce first cost
 - Loans (incl. low and no interest)
 - Energy-efficient mortgages
 - Leases/On-bill financing
 - ESCo shared-savings
- Combinations: technical assistance, subsidy and financing

A large and untapped resource remains...

- ACEEE Meta-study (2004)
 - Achievable potential = 24% electricity
- Inter-laboratory Working Group (2000)
 - 24% electricity savings achievable across U.S.
- NYSERDA (2003 & 2006)
 - NYS GHG reduction targets can be met by lowering electricity use by 11% (2012) and 14.1% (2022) at a cost of less than 3 cents/kWh; and yield \$4.5 - 9.1 billion in net economic benefits
 - 28% of forecast gas use economically displaceable by 2016

Public/Utility Programs Limited

- State/utility programs to address the efficiency gap are good as far as they go...
 - “Iron ceiling” on funding
 - Legislatures have raided system benefit funds
 - Large up-front payments or debt
 - Many can’t participate even with rebate assistance
 - High administrative/transaction costs
- It’s not enough
 - At current weatherization expenditure levels, 100-150 years to treat all low-income units
 - Big savings opportunities missed because of persistent market barriers and lack of funding

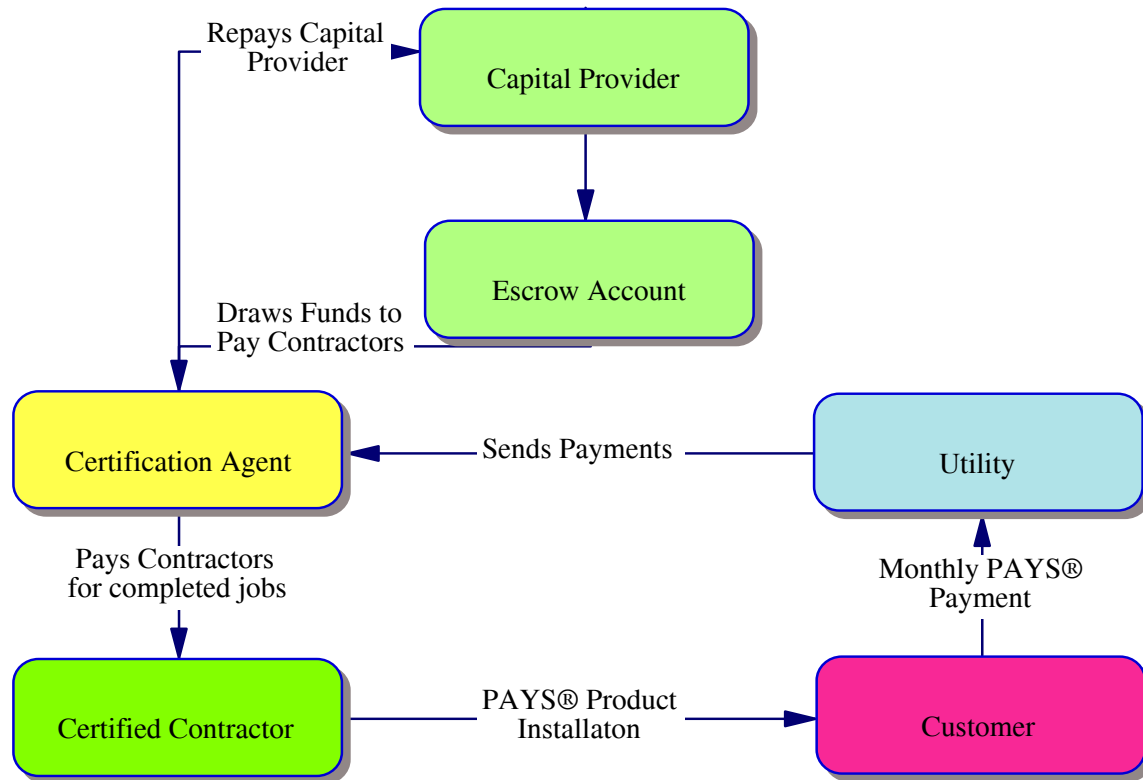
The PAYS® Opportunity

- Concept originated in 1999 by Energy Efficiency Institute
- A market-based system where customers, vendors, and capital providers acting in their own interests produce unprecedented resource efficiency investment that is also in society's interest.

How PAYS® works...

- Customer selects (qualifying) measure.
- Measure installed at no cost to Customer.
- Customer pays tariffed charge on utility bill:
 - Measures certified to provide savings right away.
 - Estimated savings greater than payment.
 - DNP for non-pay just like any other utility tariff.
- Portable measures.
 - When customer leaves, take and pay balance.
- Permanent measures.
 - When customer leaves, charges “run with the meter.”

How PAYS® works...



More Desirable “Products”

- No upfront payment
- No credit checks, liens or hassles
- No new debt obligation
- Pay only while saving (and *pay less by saving*)
- Independent certification
- Tenants can make their dwelling more efficient without risking loss of investment

All Customers Can Participate

- Renters -- landlord pays nothing; customer pays only while occupying a location.
- Customers with limited resources -- no liens, credit checks, or upfront payments required; the only obligation is to pay a lower bill.
- Businesses -- no debt obligation, no upfront payment, no commitment to location.
- MUSH customers -- agreeing to pay a lower monthly bill, so town vote, agency or board approval should not be required

First PAYS® Installation - NH (2002)

- Town of Stratford (NH) street lighting change- out
 - \$13,050 to change and relocate 58 fixtures
 - \$6,292 annual savings
- Would pay for itself in 2 years, but...
 - Voters turned down project
 - Did not want to take on debt
- PAYS® did not require voter approval
 - Not a loan, but a utility bill
- “We couldn’t have done it without PAYS®”

Kansas Pilot with PAYS® Elements

- Residential pilot program (mostly single family)
- Commission approval December 20, 2007
- Landlords required to assume risk of measure failure – not PAYS®
- 234 audits, 47 buildings completed (6 rental); 98 rejections; 89 plans in pipeline; demand overwhelmed contractors - 6 month or longer wait (8/1/08)

Hawaii PAYS® Pilot

- PAYS® legislation -- 2005
- Solar hot water (SHW) heating pilot
- Commission approved 3 utilities to offer PAYS® tariff on June 29, 2007
- \$1,000 rebates and very high rates make SHW cost effective

State by State

- *System set up and operation*
 - *One-time*: *system set up*
 - *tariff design and approval*
 - *billing system adjustments*
 - *set up third-party certification*
 - *find capital provider(s)*
 - *Ongoing*: *operating and financing costs are built into PAYS® customers' charges*

State by State

- State Commission must approve PAYS® tariff:
 - Defines measure eligibility and customers
 - Specifies rules & responsibilities of vendors, utilities and customers
 - Identifies Certification Agent and role
 - Permits utility recovery of PAYS® bad debt like other bad debt*

* In reality, PAYS® bad debt MUCH lower than typical utility bad debt.

More Information

PAYS America

www.paysamerica.org

Energy Efficiency Institute

www.eeivt.com

802-879-8895