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Extending Efficiency Services to Underserved Households: NYSERDA's Assisted Home Performance with ENERGY STAR Program

Since 2001, New York residents have completed over 39,000 energy upgrades through NYSERDA's Home Performance with ENERGY STAR (HPwES) initiative. Approximately one third of these projects have been completed through the Assisted HPwES track, which offers large incentives to middle income households who do not qualify for the free Weatherization Assistance Program (WAP). New York's suite of energy efficiency offerings, from free weatherization for low income residents, to free energy assessments and large energy upgrade financial incentives for middle income households, to reduced incentives for higher income homeowners represents a compelling approach to delivering energy improvements in the residential sector. These incentives are complemented by the recently-launched Green Jobs-Green New York (GJGNY) financing platform, which uses alternative underwriting criteria in an effort to qualify creditworthy households for financing and reduce the 40+ percent loan applicant rejection rate NYSERDA experienced with the Fannie Mae Energy Loan.

Assisted Home Performance with Energy Star (AHPwES)

AHPwES provides middle income New York homeowners with a free home energy assessment and rebates of 50 percent of the energy upgrade cost (up to $5,000) for single family homes.[1] Qualifying households can also take advantage of several financing products to cover the cost of the remaining 50 percent of their upgrade – and, in some areas, community groups have covered the other 50 percent with grants. Historically, about one third of the HPwES projects completed in New York have come through the Assisted track, but these numbers dropped during the recession and, in 2010, the number of units completed missed program goals and failed to exhaust available program funds. Before the launch of GJGNY in late 2010, AHPwES jobs were down to about 17 percent of all home energy upgrades.

NYSERDA Program Manager John Ahearn believes that the AHPwES target population has been hard hit by the financial crisis and ensuing recession, and many households are just not willing and/or able to make even heavily-incented energy efficiency investments. Crystal Purcell, Deputy Director at Home

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[1] Households earning 60 to 80 percent of AMI qualify for NYSERDA's AHPwES program. Those households earning less than 60 percent of AMI qualify for the Weatherization Assistance Program (WAP) and NYSERDA's EmPower New York[SM] program.

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HeadQuarters (HHQ),[2] a New York CDFI, said that the majority of households financing energy upgrades through HHQ are motivated to participate in New York's AHPwES program by the need to address an urgent equipment or structural repair or replacement. She noted that as a result of the difficult economy, many middle income households are deferring basic investments in maintaining their homes – notably in addressing roofing issues – and, over the past several years, HHQ has seen its home improvement loan portfolio shift away from investments in preventative maintenance and towards investments in emergency interventions.

With the launch of GJGNY in late 2010, AHPwES participation rebounded in 2011 to 36 percent of all completed jobs. NYSERDA residential programs manager, Karen Hamilton, believes that a contributor to this increase has been the free energy assessment provided to income-qualified households through GJGNY. According to many participating contractors, the $350 to $500 assessment cost was a major barrier for middle income households. The AHPwES conversion rate from free assessment to energy upgrade has been 30 percent – in-line with overall program averages – and Hamilton attributes this to New York's mature contractor infrastructure, "Our contractors know how to screen customers and sell jobs." In addition, many AHPwES participants are referred to the program by WAP providers, who likely provide an initial level of pre-screening.

Increasing Access to Financing

NYSERDA has historically used Fannie Mae Energy Loans to provide HPwES participants with access to financing. The underwriting standards on this unsecured loan product, including a minimum credit score of 640 and maximum debt-to-income (DTI) ratio of 50 percent,[3] made financing inaccessible to many households – in recent years over 40 percent of loan applications were rejected. NYSERDA has declined more loan applications because household debt-to-income (DTI) ratios exceed the allowable limit than for any other reason – 43 percent of NYSERDA's loan application declines (17 percent of loan applicants) have been caused by excessive DTI ratios while just 23 percent of declines were triggered by low household credit scores (see Figure 1). Major credit events like bankruptcy, foreclosure, repossession and outstanding collections, judgments or charge offs account for 31 percent of loan denials – and this ~12 percent of loan applicants will be very difficult to serve moving forward.

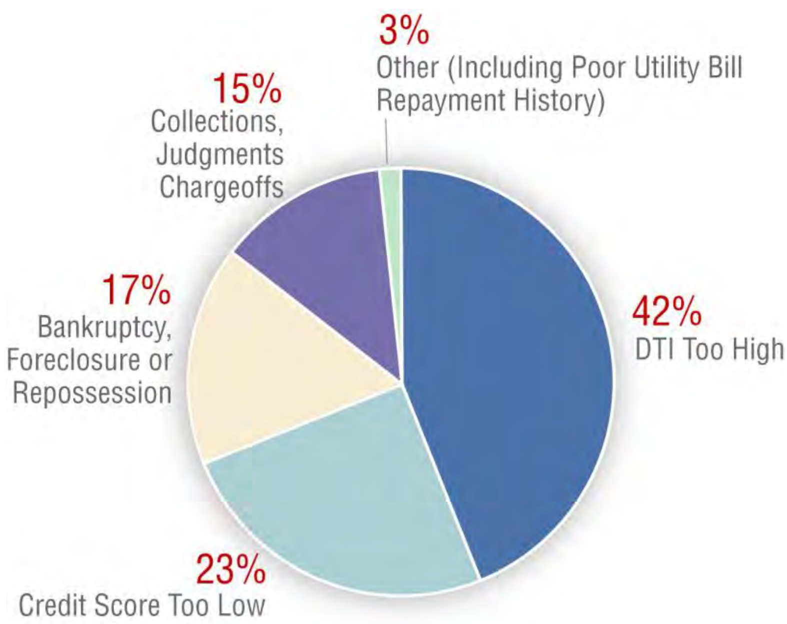

Figure 1. Reason for application rejection in NYSERDA's residential energy efficiency loan program November 2010-December 2011. (NYSERDA)

[2] Home Headquarters is a program partner of NYSERDA. See *Home HeadQuarters: Offering Another Financing Option For Less Qualified Households* below.
[3] Minimum credit score is 680 if self-employed for at least two years and 720 if self-employed for less than two years.

In November 2010, NYSERDA replaced its Fannie Mae Energy Loan offering and, through its GJGNY financing platform, is now using two tiers of underwriting standards to qualify applicants for up to 15 year unsecured loans from $3,000 ($1,500 for AHPwES customers) to $25,000;[4] with an initial interest rate of 3.99 or 3.49 percent.[5]

Tier One underwriting uses standard credit score (minimum 640)[6] and DTI (maximum 50 percent) metrics to evaluate creditworthiness; 48 percent of applicants are rejected for this financing. NYSERDA is trying to reduce this decline rate with its Tier Two standards that offer households with low FICO scores or high DTIs a second opportunity to qualify for GJGNY financing (see Table 1 for a description of Tier Two underwriting standards). For those households with FICO scores below 640, NYSERDA Tier Two standards increase the maximum DTI to 55 percent and use utility bill repayment history in lieu of credit score to assess creditworthiness. For households with a FICO score above 680 that were rejected from Tier One because they had a DTI ratio above 50 percent, Tier Two standards increase the maximum DTI to 70 percent and use utility bill repayment history.[7] These Tier Two underwriting standards offer a new approach to assessing consumer creditworthiness and helping more homeowners overcome the upfront cost hurdle of an energy upgrade.

<table>
<tr><th colspan="2">Eligibility Requirements</th><th>Participant Benefits</th></tr>
<tr><td colspan="2"><u>Tier 1</u>
FICO≥640
DTI≤50%</td><td rowspan="2">3.99% financing
(3.49% with automatic ACH payment)
Up to $25,000</td></tr>
<tr><td><u>Tier 2 (Low FICO)</u>
FICO≤640
DTI≤55%
Strong Utility Bill & Mortgage Repayment History</td><td><u>Tier 2 (High DTI)</u>
FICO≥680
50≤DTI≤70%
Strong Utility Bill & Mortgage Repayment History</td></tr>
</table>

Table 1. New York's Green Jobs-Green New York financing underwriting criteria. (NYSERDA)

Since its November 2010 launch, over $7.8 million has been loaned to 908 households through the GJGNY initiative, of which 48 loans ($417,888) have been issued to households qualifying under the new Tier Two standards (See Figure 2). Tier Two underwriting criteria have increased access to capital on the margin, increasing NYSERDA's overall loan application approval rate by over two percent. This increase may underestimate the impacts of using utility bill repayment history as a means of assessing creditworthiness as a multi-step application process appears to have posed a significant hurdle for many

[4] If projects have a payback period (the amount of time it takes for the work to "pay for itself" in energy savings) of 15 years or less, a homeowner can finance up to $25,000. If the payback period is longer than 15 years, the maximum amount eligible for financing is $13,000.
[5] The interest rate is 3.49 percent for participants that establish automatic bill pay – a potentially innovative incentive to reduce administrative costs and loan non-payment rates.
[6] Minimum FICO score is 640, unless self-employed – minimum 680 if self-employed for at least 2 years, or minimum 720 if self-employed less than two years.
[7] There are many ways to calculate debt to income (DTI) ratios. Most programs use gross income. It is not clear, therefore, that a 70 percent DTI maximum is a meaningful metric for assessing creditworthiness (e.g. many households pay close to a third of gross income in taxes, suggesting that this metric might exclude very few households as debt service could include 100 percent of household net income). NYSERDA already assesses DTI ratios as part of its Tier 1 evaluation, but programs using a different underwriting process should consider this issue.

potential Tier Two participants and NYSERDA only launched the "High DTI" underwriting criteria in July 2011.[8] NYSERDA has already made several changes to the Tier Two underwriting criteria since the initiative launched in 2010, which is indicative of the flexibility that is essential to experiment with more accessible financing tools.

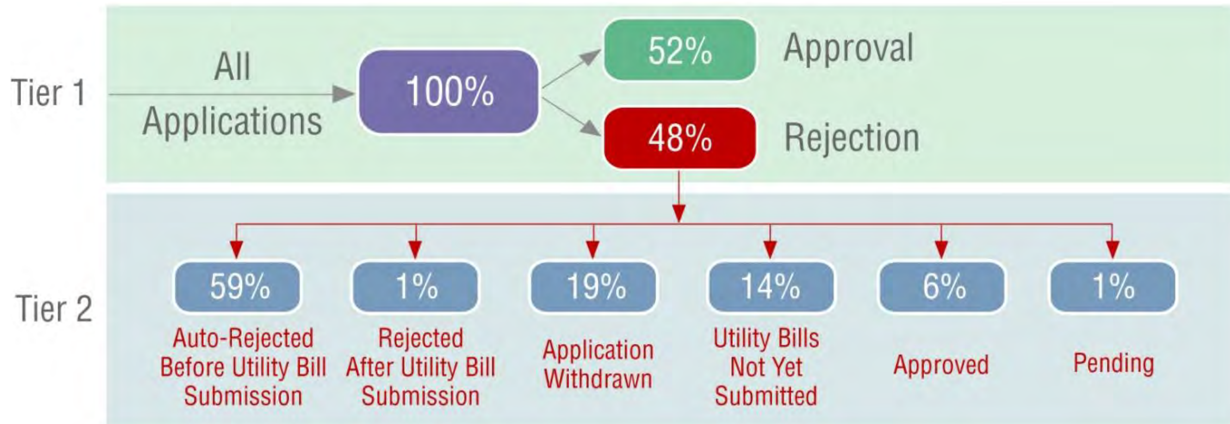

Figure 2. Summary of NYSERDA's GJGNY Loan Application Process and Data (as of December 2011). (NYSERDA)

While both Tier One and Tier Two loans are initially being funded with a revolving loan fund (RLF), NYSERDA plans to sell its portfolio of Tier One loans to secondary market investors. NYSERDA plans to issue Qualified Energy Conservation Bonds (QECBs) secured by the loan pool repayment stream.[9,10] Bond proceeds will replenish the RLF and be used to provide additional energy efficiency loans. NYSERDA will hold its portfolio of Tier Two loans and monitor its performance until a sufficient track record has been established.[11] NYSERDA's long term goal is to issue bonds secured by the combined repayment stream of a single pool of Tier One and Tier Two loans.

Home Headquarters: Offering an Alternative for Less Qualified Households

[8] GJGNY requires that applicants not qualified under Tier One but not initially disqualified from Tier Two for reasons unrelated to utility bill repayment history (e.g. recent bankruptcy, high DTI) to proactively submit utility bills. This step has been a significant barrier as more than 80 percent of applicants have failed to follow-up with bill submission. While the overall loan application approval rate increased by just 2.6 percent, this may underestimate the impacts of using utility bill repayment history as other underwriting criteria and the multi-step application process appear to have been significant hurdles. For example, if 84 percent (the rate of loan approval for applicants that submitted utility bills) of all households not automatically disqualified from the Tier Two track (e.g. those that failed to submit their utility bills) had been approved, GJGNY's approval rate would have increased by 16 percent.

[9] A QECB is a debt instrument whose interest is subsidized by the United States Treasury. QECBs may be issued by state, local and tribal governments for qualified energy purposes. NYSERDA will use $20 million of the state's QECB allocation as well as at least $5 million from local governments that have reverted their allocations to the state to support GJGNY. More information on QECBs is available HERE.

[10] NYSERDA plans to use a portion of its BetterBuildings grant to support the QECB issuances with a loan loss reserve (LLR) and debt service reserve (DSR). More information on LLRs and DSRs available HERE.

[11] Ultimately, the viability of these alternative underwriting approaches must be assessed not based on how many loans additional loans are made, but whether such loans exhibit payment performance that justifies approving borrowers who would otherwise not qualify for financing.

Income-qualified homeowners in central and upstate NY can also apply for financing through Home Headquarters (HHQ), Inc., a CDFI and a chartered member of NeighborWorks America.[12] HHQ has been offering a range of secured and unsecured financing products to qualifying households participating in the AHPwES program for several years, averaging approximately 20 loan originations per month, and has not had a single default. NYSERDA buys down the loan interest rate from seven to three percent and pays NeighborWorks $425 for each originated loan – $75 for determining income eligibility for AHPwES and $350 for providing credit counseling, financing management education, and pre/post upgrade inspection.[13] This counseling and education are critical to HHQ's low loan default rate – it issues over 800 home improvement loans a year and has a default rate below five percent on this portfolio.

GJGNY Update

In January 2012, NYSERDA launched a residential On-Bill Recovery (OBR) energy efficiency financing pilot. The underwriting criteria and loan terms for the OBR loans are similar to GJGNY loans, differing only in the interest rate (2.99 percent for OBR loans compared to 3.99 percent for GJGNY loans) and security (a subordinated, transferable mortgage for OBR loans compared to unsecured for GJGNY loans).[14]

Resources

Program Website & Contact	
Program Website	http://nyserda.ny.gov/en/Program-Areas/Energy-Efficiency-and-Renewable-Programs/Green-Jobs-Green-New-York.aspx
Program Contact	Jeff Pitkin, Treasurer, NSYERDA jjp@nyserda.org
LBNL Reports & Policy Briefs	
Zimring, M., M.G. Borgeson, I. Hoffman, C. Goldman, E. Stuart, A. Todd, and M. Billingsley. **"Delivering Energy Efficiency to Middle Income Single Family Households."** LBNL-5244E. December 2011.	http://middleincome.lbl.gov
Zimring, M., and M. Fuller. **"NYSERDA's Green Jobs-Green New York Program: Extending Energy Efficiency Financing to Underserved Households"** Clean Energy Program Policy Brief. LBNL-4556E January 2011.	http://eetd.lbl.gov/ea/emp/reports/ee-policybrief_012411final.pdf

[12] In addition to offering affordable financing, HHQ provides credit counseling, financial management education, pre/post site confirmation, verifying the existing condition of home and the installation of proscribed measures. Under the previous contract/RFP, NYSERDA provided compensation to HHQ, $75 for each income eligibility determination and $350 for the other services, however under the next funding cycle these incentives are not likely to be continued.

[13] NYSERDA does not have sufficient funding to continue the $350 counseling, education and inspection incentive. However, Neighborworks expects to continue to offer these services using alternative funding sources as program managers view this program as serving the organization's core mission.

[14] More information on NYSERDA's OBR pilot available HERE.

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