

This report is in response to a requirement of Act 1 of Special Session 1 (2007-2008), known as the Alternative Energy Investment Act. It describes the status of the Homeowner Energy Efficiency Loan Program (HEELP) as well as its successes and challenges.

The Legislature defined most of the parameters of the HEELP program in the Act. The legislatively mandated program characteristics of HEELP include loan usage (weatherization and energy efficient-type repairs and improvements), loan terms (10 years and a below market rate), an income limit of 150 percent of the greater of the area or statewide median income, and certain underwriting criteria (specifics within PHFA's discretion to determine). The Act also requires PHFA to develop a network of approved contractors to do HEELP work and specifies the standards that contractors must meet to be approved.

PHFA uses a total debt to income ratio of 45 percent (with exceptions possible, typically not exceeding 52 percent) and a Combined Loan to Value Ratio not to exceed 120 percent of home value); and an interest rate of 1 percent. A minimum credit score is not required in the HEELP program, although a credit report is obtained to verify credit accounts. The underwriting criteria are generous compared to typical lending practices in order to benefit as many Pennsylvanians as possible. A common sense approach is utilized and full documentation of the borrower's income, assets and credit history is obtained in order to demonstrate an ability to repay the loan.

PHFA's main strategy in its first year of operation was to use HEELP as a complement to the federal Weatherization Assistance Program because: (1) Weatherization funds often cannot cover all necessarily repairs, most notably roofs, and (2) stimulus dollars were being directed to the Weatherization Program, so this was a prime opportunity to leverage that additional funding. The HEELP income limit was therefore initially set at 210 percent of the Federal Poverty Income Guideline, which equates to approximately 60 percent of the Area Median Income (AMI), and consistent with the guidelines for the Weatherization program. After a year of operation the Agency raised the income limit to 80 percent of AMI in January 2011 allowing more Pennsylvanians to take advantage of this unique funding source and opportunity to lower their energy costs. The HEELP program continues to be in a position that allows for expansion of the state's array of state-and-federally supported Energy Efficiency programs to Pennsylvanians of all income levels. These programs include:

- **Weatherization grants-** The Weatherization Assistance Program is funded by the Department of Energy and passed through to the Department of Community and Economic Development and ultimately funds are moved to the Weatherization providers at the local level. Funding is limited to \$6,500* per home, so HEELP is able to bridge the gap for repairs that require more funding, such as roof replacement.
<http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/weatherization-assistance-program>

*This is the ARRA funding level. That program ends March 2012.

- **Keystone HELP-** These low cost loans for EnergyStar rated and high efficiency heating, air conditioning, air sealing, insulation, windows, doors, geothermal, and “whole house” improvements are primarily funded by the PA Department of Environmental Protection, Pennsylvania Treasury Department, and PHFA.
<http://www.keystonehelp.com/index.php>
- **State Tax Credits-** The PA Sunshine Solar Rebate Program funded by the PA Energy Independence Fund provides rebates to residential and small commercial residents that install solar water heat, solar space heat, or photovoltaics. This program is currently in the waiting list phase. There is no guarantee of funding if the work is installed.
http://www.portal.state.pa.us/portal/server.pt/community/in_the_news/10475/pa_sunshine_solar_program/553019
- **Federal Tax Credits-** The Residential Energy Efficiency Tax Credit is funded through Federal funds and is available for water heaters, furnaces, boilers, heat pumps, central air conditioners, building insulation, windows, doors, roofs, and circulating fans used in a qualifying furnace.

The Residential Renewable Energy Tax Credit is also funded through Federal funds. Eligible uses include solar water heat, photovoltaics, wind, fuel cells, geothermal heat pumps, and other solar technologies.

<http://www.energystar.gov/taxcredits>

This array provides Pennsylvanians with grants, loans, and tax credits to help pay for or reimburse them for general energy efficiency work (such as air sealing, insulation, heating system repair and/or replacement, minor repairs that allow Weatherization to occur, homeowner education), whole house (heating, cooling, insulation, and air sealing projects that are accompanied by a whole house energy audit), solar, and recently geothermal heating.

HEELP loans strengthen offerings at the lower end of the income scale compared to the Keystone HELP program and tax credit incentives. The Agency has used these funds to support full Weatherization Assistance Program expenditures and to ensure that all Pennsylvanians have some type of option for home energy efficiency assistance.

PHFA prefers Community Action Provider (CAP) and Weatherization Agency Providers (WAP) involvement because they can provide homeowner education, suggest energy efficiency solutions, recognize reasonable costs, and help with contractor selection, and contractor oversight. CAP/WAP participation is voluntary, however, and remaining ARRA and other commitments have, we believe, lowered agency participation in HEELP. Our participating agencies are to date:

- ACTION-Housing, Inc.
- Cambria Community Development Corp.
- Community Action Association of Delaware County
- Fayette County Redevelopment Authority
- Housing Development Corp. of Northeast PA
- Philadelphia Neighborhood Housing Services

PHFA continues to make outreach through CAP/WAP professional associations and directly to potential local program administrators.

Program Statistics

As of November 1, 2011, 97 loans have been approved out of a total of 375 applications received, for an approval rate of 26 percent. While this may seem low, this approval rate is due to the majority of applicants not being able to afford any additional debt.

Appendix A is a list of all HEELP loans closed on or before November 1, 2011. The total number of closed loans as of November 1, 2011 is 75. The number of loan closings is less than approvals due to loans working their way through the process. Once approved, borrowers must secure an acceptable estimate for the work they have requested. Their chosen contractors must submit Contractor Applications, if not already approved, and borrowers must make themselves available for telephone closings during business hours.

Energy Savings

In an effort to keep origination/operation costs to a minimum, PHFA has attempted to use existing energy savings reports wherever possible. For this reason, the Agency intended to use energy efficiency information already gathered by CAPs/WAPs, thus saving the \$250 to \$400 projected cost of energy audits for each household. As borrowers were approved for loans, however, it became apparent that very little energy savings data for these households would be available. Many borrowers had had weatherization work done to their home prior to recent federal testing requirements and were using HEELP loans to finish installing energy efficiency items that had been recommended to them and to repair or replace roofs. Or, approximately forty percent of the borrowers were working independently of an assistance agency.

Roofs are an interesting aspect of the HEELP program. Fifty-four of the 75, or 72 percent, of the HEELP loans closed as of November 1 have had roof replacement or repair as the largest single expenditure of the loan. Roof repair is a common barrier to weatherization grant work being performed and maintaining homeowner's insurance as well.

Now at the end of HEELP's second year, PHFA is confronting the "post-install" data issue as it impacts the Agency ability to report energy savings from HEELP work. Of the 74 loans included in our review period, loans closed prior to November 1, 2011, 11 should have provided their

second six months of energy usage information; 22 should have provided their first six months of energy usage information; and 52 are not six months out from their installation date and do not yet owe the Agency usage information.

Actual responses to the energy usage submission requirements indicate that many borrowers are not bothering to meet their obligation to provide usage information despite repeated Agency efforts via telephone and mail (and email if available) to procure the data. Staff have not received any second six months (months 6-12) of energy usage information (0 out of 11); and have received 17 out of 22, or 77%, first six months.

Table A (Change in Reported Energy Usage- Borrowers with Pre and Post Data Only) summarizes for each borrower their average Electric, Gas, and Fuel Oil consumption for the same six months prior to installation and post-installation. For example, Borrower 1's data is for the months of December 2009, January, February, March, April, and May 2010 for pre-install data and December 2010, and January, February, March, April, and May 2011 for post-install. The responses received often show energy use increases rather than reductions, which typically indicates a more severe winter and other behavioral changes by borrowers. Again, it also reflects that the majority of the work paid for with HEELP loans, roofs, typically have little impact on reducing energy usage. Table B summarizes energy usage information received from all borrowers with closed loans.

At this time, PHFA considers two solutions to the data collection problem to be viable- although neither is appealing. One is to begin pilot efforts to introduce energy audits into this program and the second is to mandate the order of repairs being done. Energy audits are costly per loan and will reduce the number of loans that can be made. Audits cost typically between \$250 and \$400 and we do not believe are justifiable costs to fully allocate to each borrower. These borrowers need their loan proceeds to go into their homes. Often there is considerable deferred maintenance to be overcome. Also, an audit will not improve the efficiency of a roof repair/replacement. Although if auditor involvement increased caulking, sealing and insulation as a loan use, as would be expected, that would be an improvement that might be reflected in the following year's energy usage statistics.

The second option is mandating the order in which improvements are undertaken. This seems likely to alienate some borrowers and produce little change for the majority. This type of loan program typically requires borrowers to first attend to their roofs, second to their heating/cooling systems, followed by caulking, sealing, insulating, and finally windows and doors. Because borrowers who need roof repairs would still be directed to get those first in a mandated system the HEELP statistics would likely remain unaffected—and we would still have issues of data collection if borrowers remain unwilling to provide their usage information. PHFA will consult with utilities and Governor's Green Government Council (GGGC) to determine if there are other options that would permit better reporting in a cost effective manner.

The success of the HEELP loan in meeting Commonwealth citizens' needs; in completing a strong array of energy efficiency programs within the state; and of helping people to help themselves remains clear. This program is unquestionably effective.

Appendix A- Summary of Applications and Approved Loans

Number of Applications	Status as of Nov. 1, 2011				
	Closed	Approved	Denied	Cancelled	Pending
375	75	97	190	47	41

Approved and Closed Loans- As of November 1, 2011*

County	Approval Date	Original Principal Loan Balance	Loan Use
Adams	8/22/2011	\$ 10,000	1,2,3,4
Allegheny	10/3/2011	\$ 10,000	1,2,3,4
Allegheny	4/25/2011	\$ 10,000	4
Allegheny	3/8/2011	\$ 9,997	1,2,4
Allegheny	4/21/2011	\$ 9,524	2,4
Allegheny	3/29/2011	\$ 5,000	2,4
Allegheny	3/8/2011	\$ 10,000	2,4
Beaver	10/3/2011	\$ 10,000	2,4
Bedford	5/6/2011	\$ 4,995	1
Berks	7/25/2011	\$ 8,000	4
Berks	3/18/2011	\$ 5,765	4
Berks	11/15/2010	\$ 9,644	2,3
Cambria	8/12/2010	\$ 6,845	4
Cambria	8/24/2011	\$ 10,000	2,4
Cambria	9/8/2011	\$ 6,000	2,4
Cambria	11/24/2010	\$ 10,000	3,4,5
Carbon	7/25/2011	\$ 8,180	2,4
Clearfield	7/29/2010	\$ 5,370	2
Crawford	11/10/2010	\$ 7,375	4
Cumberland	8/5/2011	\$ 6,490	2,4
Dauphin	9/24/2010	\$ 4,698	4
Delaware	4/22/2010	\$ 5,300	4
Delaware	5/11/2011	\$ 9,890	4
Delaware	10/27/2011	\$ 9,580	2,4
Delaware	7/7/2010	\$ 9,250	4
Delaware	10/27/2010	\$ 9,170	2,3,4
Delaware	6/17/2011	\$ 4,420	2
Delaware	6/28/2010	\$ 4,080	5
Delaware	8/31/2011	\$ 9,925	4
Delaware	3/17/2011	\$ 4,530	4
Delaware	5/27/2010	\$ 6,840	4
Delaware	6/1/2010	\$ 9,190	5
Delaware	10/24/2011	\$ 4,820	3,4
Delaware	8/15/2011	\$ 4,810	2,4
Delaware	2/23/2011	\$ 7,760	3
Delaware	6/25/2010	\$ 9,940	2
Erie	12/23/2010	\$ 6,787	1,2
Fayette	8/10/2010	\$ 9,850	4
Fayette	3/30/2011	\$ 9,971	2,3
Fayette	5/11/2011	\$ 10,000	4
Fayette	7/12/2011	\$ 8,000	2,4
Fayette	7/12/2011	\$ 10,000	4
Fayette	8/31/2011	\$ 10,000	2,4
Jefferson	10/25/2010	\$ 5,000	3
Lancaster	12/23/2010	\$ 10,000	3
Lancaster	10/7/2011	\$ 5,000	4
Lawrence	4/5/2011	\$ 9,860	4
Lebanon	9/22/2011	\$ 10,000	1,2,3
Lehigh	10/25/2011	\$ 4,763	3

Approved and Closed Loans- As of November 1, 2011* cont'd.

County	Approval Date	Original Principal Loan Balance	Loan Use
Luzerne	6/14/2011	\$ 5,600	4
Luzerne	8/22/2011	\$ 10,000	5
Luzerne	8/22/2011	\$ 10,000	1,2,4,5
Luzerne	10/6/2011	\$ 5,000	4
Luzerne	4/6/2011	\$ 9,922	2,4
Luzerne	11/22/2011	\$ 9,950	2,3,4,5
Lycoming	6/29/2011	\$ 10,000	1,3
Lycoming	10/28/2011	\$ 9,969	1,3
Mercer	8/15/2011	\$ 10,000	4
Mercer	3/18/2011	\$ 10,000	1,2
Mifflin	8/17/2011	\$ 8,900	4
Northumberland	12/10/2010	\$ 2,786	2
Philadelphia	5/23/2011	\$ 9,933	1,2,3,4
Philadelphia	5/11/2011	\$ 4,875	4
Somerset	10/31/2011	\$ 10,000	2,4
Washington	11/15/2011	\$ 10,000	4
Wayne	7/12/2011	\$ 10,000	4
Westmoreland	6/8/2011	\$ 9,124	2,3,4
Westmoreland	7/28/2011	\$ 10,000	4
Westmoreland	10/21/2010	\$ 10,000	2,4
Westmoreland	4/21/2011	\$ 8,200	1,4
Westmoreland	5/6/2011	\$ 10,000	4
Westmoreland	6/9/2011	\$ 6,975	2,4
York	10/6/2011	\$ 4,000	1
York	11/30/2010	\$ 4,030	4
	TOTALS	\$ 595,883	
<p>Loan Use 1- Air sealing/insulation/ducts 2- Energy Efficient windows/doors 3- Energy Efficient heating/cooling 4- Roofing repairs and/or replacement 5- Miscellaneous</p>			

*This table represents closed loans only.

Approved Not Yet Closed- As of November 1,
2011*

County	Approval Date	Original Principal Loan Balance	Loan Use
Allegheny	10/6/2011	\$ 10,000	4
Allegheny	10/6/2011	\$ 10,000	4
Allegheny	10/27/2011	\$ 10,000	1,2,4
Cambria	10/17/2011	\$ 10,000	4
Carbon	10/6/2011	\$ 10,000	1,2,3,4
Clearfield	9/1/2011	\$ 10,000	4
Cumberland	10/27/2011	\$ 10,000	2,3
Dauphin	10/27/2011	\$ 10,000	3
Fayette	9/28/2011	\$ 10,000	2,4
Fayette	10/17/2011	\$ 10,000	3,4
Fayette	10/6/2011	\$ 10,000	5
Fayette	9/21/2011	\$ 10,000	2,4
Lancaster	10/6/2011	\$ 10,000	1,2,3,4
Lancaster	9/16/2011	\$ 10,000	2,3
Lancaster	10/6/2011	\$ 10,000	2,3
Luzerne	10/27/2011	\$ 10,000	4
Luzerne	10/6/2011	\$ 5,100	4
Lycoming	6/21/2011	\$ 10,000	2
Philadelphia	10/17/2011	\$ 10,000	4
Westmoreland	10/17/2011	\$ 10,000	2,4
	TOTALS	\$ 195,100	
<p>Loan Use</p> <p>1- Air sealing/insulation/ducts 2- Energy Efficient windows/doors 3- Energy Efficient heating/cooling 4- Roofing repairs and/or replacement 5- Miscellaneous</p>			

*This table represents applications that were received on or before November 1, 2011 that have been approved and are not yet closed.

Appendix B - Energy Usage Summary

TABLE A: Change In Reported Energy Usage-
Borrowers with Pre and Post Install Data Only

Borrower	Pre-Install						Post-Install						Weatherization Services?: Y or N
	Electric		Additional Utility- Gas		Additional Utility- Fuel		Electric		Additional Utility- Gas		Additional Utility- Fuel		
	Avg. \$	Avg. Msmt./kwh	Avg. \$	Avg. Msmt./ccf	Avg. \$	Avg. Msmt./gal.	Six month Avg. \$	Six month Avg. Msmt./kwh	Six month Avg. \$	Six month Avg. Msmt./ccf	Six month Avg. \$	Six month Avg. Msmt./gal.	
1	\$ 151	932	\$ 162	119			\$ 204	1210	\$ 111	96			N
2	\$ 79	851	\$ 136	127			\$ 95	980	\$ 86	156			N
3	\$ 65	592	\$ 77	60			\$ 73	696	\$ 70	5			Y
4	\$ 54	507	\$ 170	14			\$ 69	532	\$ 163	5			N
5	\$ 47	405	\$ 119	12			\$ 51	378	\$ 111	13			N
6	\$ 56	606	\$ 34	23			\$ 72	758	\$ 93	69			N
8	\$ 56	511			\$ 274	116	\$ 56	440			\$ 398	130	N
9	\$ 120	958	\$ 116	84			\$ 147	1170	\$ 59	44			N
10	\$ 58	427	\$ 413	323			\$ 66	432	\$ 399	349			N
11	\$ 144	1,017			\$ 420	150	\$ 226	1558					N
12	\$ 244	2,314			\$ 270	100	\$ 256	3139			\$ 200	595	N
14	\$ 104	769	\$ -	-			\$ 84	561	\$ 73	57			N
16	\$ 26	138			\$ 284	113	\$ 25	123			\$ 369	111	Y
17	\$ 163	1,345	\$ 55	44			\$ 147	1113	\$ 65	52			N
20	\$ 48	390	\$ -	-			\$ 59	405	\$ -	0			N
21	\$ 62	657	\$ 127	121			\$ 77	779	\$ 154	133			N
22	\$ 36	243			\$ 321	122	\$ 36	216			\$ 361	125	N
Average	\$ 89	745	\$ 117	77	\$ 314	120	\$ 103	852	\$ 115	81	\$ 332	240	

Appendix B - Energy Usage Summary

TABLE B: Change In Reported Energy Usage- All Borrowers (includes non-compliant borrowers)

Borrower	Pre-Install				Post-Install								Weatherization Services?: Y or N
	Electric		Additional Utility- Gas		Additional Utility- Fuel Oil		Electric		Additional Utility- Gas		Additional Utility- Fuel Oil		
	Avg. \$	Avg. Msmt./kwh	Avg. \$	Avg. Msmt./ccf	Avg. \$	Avg. Msmt./gal.	Six month Avg. \$	Six month Msmt./kwh	Six month Avg. \$	Six month Msmt./ccf	Six month Avg. \$	Six month Msmt./gal.	
1	\$ 151	932	\$ 162	119			\$ 204	1210	\$ 111	96			N
2	\$ 79	851	\$ 136	127			\$ 95	980	\$ 86	156			N
3	\$ 65	592	\$ 77	60			\$ 73	696	\$ 70	5			Y
4	\$ 54	507	\$ 170	14			\$ 69	532	\$ 163	5			N
5	\$ 47	405	\$ 119	12			\$ 51	378	\$ 111	13			N
6	\$ 56	606	\$ 34	23			\$ 72	758	\$ 93	69			N
7	\$ 173	1,610	\$ 34	24									N
8	\$ 56	511			\$ 274	116	\$ 56	440			\$ 398	130	N
9	\$ 120	958	\$ 116	84			\$ 147	1170	\$ 59	44			N
10	\$ 58	427	\$ 413	323			\$ 66	432	\$ 399	349			N
11	\$ 144	1,017			\$ 420	150	\$ 226	1558					Y
12	\$ 244	2,314			\$ 270	100	\$ 256	3139			\$ 200	595	N
13	\$ 140	1,126			\$ 1,353	404							N
14	\$ 104	769	\$ -	-			\$ 84	561	\$ 73	57			N
15	\$ 157	1,160	\$ 161	18			\$ -	0	\$ -	0			Y
16	\$ 26	138			\$ 284	113	\$ 25	123			\$ 369	111	Y
17	\$ 163	1,345	\$ 55	44			\$ 147	1113	\$ 65	52			N
18	\$ 83	890	\$ 275	95			\$ -	0	\$ -	0			N
19													N
20	\$ 48	390	\$ -	-			\$ 59	405	\$ -	0			N

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TABLE B: Change In Reported Energy Usage- All Borrowers (includes non-compliant borrowers)

Borrower	Pre-Install				Post-Install								Weatherization Services?: Y or N
	Electric		Additional Utility- Gas		Additional Utility- Fuel Oil		Electric		Additional Utility- Gas		Additional Utility- Fuel Oil		
	Avg. \$	Avg. Msmt./kwh	Avg. \$	Avg. Msmt./ccf	Avg. \$	Avg. Msmt./gal.	Six month Avg. \$	Six month Msmt./kwh	Six month Avg. \$	Six month Msmt./ccf	Six month Avg. \$	Six month Msmt./gal.	
21	\$ 62	657	\$ 127	121			\$ 77	779	\$ 154	133			N
22	\$ 36	243			\$ 321	122	\$ 36	216			\$ 361	125	N
23	\$ 101	718	\$ 22	12			\$ -	0	\$ -	0			N
24	\$ 111	1,189	\$ -	-			\$ -	0	\$ -	0			N
25	\$ 90	690	\$ 191	13			\$ -	0	\$ -	0			N
26	\$ 116	1,274			\$ 386	150	\$ -	0			\$ -	0	N
27	\$ 106	742	\$ 118	13			\$ -	0	\$ -	0			N
28	\$ 130	1,207					\$ -	0					N
29	\$ 93	666	\$ 240	19			\$ -	0	\$ -	0			N
30	\$ 106	993			\$ 474	183	\$ -	0			\$ -	0	N
31	\$ 218	1,486											N
32	\$ 298	1,557	\$ 287	261			\$ -	0	\$ -	0			N
33	\$ 73	790	\$ 205	127			\$ -	0	\$ -	0			N
34	\$ 93	219	\$ 162	134			\$ -	0	\$ -	0			N
35	\$ 39	221	\$ 78	60			\$ -	0	\$ -	0			N
36	\$ 119	975	\$ 75	39			\$ -	0	\$ -	0			N
37	\$ 130	809											Y
38	\$ 95	1,038	\$ 107	86			\$ -	0	\$ -	0			N
39	\$ 125	1,464	\$ 77	62			\$ -	0	\$ -	0			N
40	\$ 38	475	\$ 71	74			\$ -	0	\$ -	0			N

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TABLE B: Change In Reported Energy Usage- All Borrowers (includes non-compliant borrowers)

Borrower	Pre-Install				Post-Install								Weatherization Services?: Y or N	
	Electric		Additional Utility- Gas		Additional Utility- Fuel Oil		Electric		Additional Utility- Gas		Additional Utility- Fuel Oil			
	Avg. \$	Avg. Msmt./kwh	Avg. \$	Avg. Msmt./ccf	Avg. \$	Avg. Msmt./gal.	Six month Avg. \$	Six month Avg. Msmt./kwh	Six month Avg. \$	Six month Avg. Msmt./ccf	Six month Avg. \$	Six month Avg. Msmt./gal.		
61	\$ 112	798			\$ 130	46								N
62	\$ 119	739			\$ 566	165								N
63	\$ 102	734	\$ 110	265										N
64	\$ 126	1,083			\$ 271	282								N
65	\$ 148	1,239			\$ 267	116								N
66	\$ 108	611	\$ 386	110										N
67														N
68	\$ 282	1,539			\$ 343	99								N
69	\$ 94	666	\$ 85	67										N
70	\$ 109	358	0	0										N
71	\$ 188	1040			\$ 627	179								Y
72	\$ 17	356	0	0										N
73	\$ 68	506	\$ 311	157										N
74	\$ 166	1568			\$ 405	150								N
Average*	\$ 107	856	\$ 124	69	\$ 424	153.82	\$ 42	345	\$ 49	35	\$ 147	107		

* Again, average includes borrowers who reported or are not yet due to report energy use information.