

# Holland Energy Fund Home Energy Retrofit Program

Implementation Guide

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## DOCUMENT HISTORY

Version	Date	Nature of Revisions
1.0	December 31, 2015	Initial Implementation Guide
1.1	August 5, 2016	Edited for semantics and verbal clarity
1.2	August 24, 2016	Edited for contract language and agency references
2.0	June 1, 2017	Changed cover logo and title to Holland Energy Fund Home Energy Retrofit Program Updated incentive, effective July 1, 2017 Updated formatting to coincide with On-Bill Loan Program Implementation Guide
2.1	October 24, 2017	Added text to clarify eligible alternative energy measures and requirements

This report is available on the City of Holland's website ([www.cityofholland.com/hef](http://www.cityofholland.com/hef)) and for review at the office of the clerk at 270 S. River Avenue, Holland, MI. Tim Vagle, President of the Holland Energy Fund, is the city official authorized to enter contracts on behalf of the Holland Energy Fund under the 2014 Michigan Municipal Utility Residential Clean Energy Program Act (PA 408).

# EXECUTIVE SUMMARY

This implementation guide outlines the details and requirements of the Holland Energy Fund's (HEF) Home Energy Retrofit Program (HER). HER is designed to be an easily accessible resource that improves the City of Holland's housing stock, significantly reduces residential energy consumption, improves quality of life and builds community pride. This guide functions as a reference document for HER Program stakeholders; including residents and contractors.

HER is a significant component of the Holland Community Energy Plan (CEP). Completed in 2011, the CEP is a forty year multi-faceted energy strategy designed to achieve energy security, competitive advantage and environmental goals for the City of Holland. The CEP envisions a thriving world-class city which generates energy cleanly, uses it efficiently, and distributes it reliably and affordably. Implementation of the CEP is guided by a steering committee and aligned citizen-led task forces.

HER is identified as a scale project within the CEP having the goal of substantially increasing the efficiency of Holland's 7,400 single-family homes through focused renovation. Deep energy investments to achieve a net energy efficiency improvement of 50% over the current city-wide average will reduce utility costs for homeowners, improve property values and avoid investment in additional generating capacity.

Holland will create transparency related to the energy use of buildings by encouraging the creation of an energy performance score/label whenever a home is sold, rented or renovated.

The project is a partnership between the HEF and the individual homeowners with each partner making a financial contribution. These investments are seen as a cost effective means to improve neighborhoods, decrease energy consumption, enhance building comfort, and reduce utility bills. The Home Energy Retrofit Task Force (HERTF) was created to study, design and recommend methods of achieving these goals.

The HERTF designed a pilot program which functioned as the program development vehicle and utilized incentive dollars provided by SEMCO Energy, Holland Board of Public Works (HBPW), and the City of Holland.

Despite the known benefits of energy efficiency investments, residential retrofit programs have struggled to succeed. Limited data, cumbersome program processes, and inaccessible capital have all been barriers to uptake. The HER Program has been designed to mitigate these barriers. The HER Program will focus on marketing, education, funding, streamlined process, financial incentives and repayment tools.

The HER Program design goal is congruent with that of the Holland Energy Fund's On-Bill Loan Program; To Strengthen Community and Neighborhood by:

1. Encouraging deep energy savings (environment)
2. Increasing access (equity)
3. Administratively operating in a cost-effective manner (economic)

To accomplish this goal the homeowner will use the following engagement process:

1. **Get Educated** – Work with the City of Holland Residential Energy Advisor (REA) to learn about the HER Program, to understand the advantages of deep retrofit and to initiate the program application process.

2. **Know Your Number** – Work with the REA to schedule a standardized energy audit from a contractor listed on the Michigan Saves website. The audit process will identify the necessary energy efficiency improvements and calculate your Home Energy Use Intensity Score (EUI).
3. **Put a Plan Together** – Work with the contractor and REA to create a scope of work which documents both energy efficiency improvements and pricing.
4. **Payments and Paybacks** – Work with the REA to determine payment options, including:
  1. Estimated energy cost savings
  2. Homeowner investment
  3. Holland Energy Fund (HEF) On-Bill Loan Program
  4. A combination of 1, 2, and 3.
5. **The Plan Comes to Life** – Engage the contractor to deliver the agreed upon scope of work. Seek advice from the REA as needed.
6. **Track and Validate the Savings** – The contractor will conduct a post audit and report the findings to the homeowner and the REA. The contractor will access the Department of Energy's Home Energy Score software and generate an energy efficiency ranking number. HER will create a building energy label and deliver a copy to the homeowner. The REA will monitor the homeowner's utility bills over the next year and then create a final EUI score.

## PROGRAM COMPONENTS

### Program Management

The HER Program will be administered by the City of Holland Community and Neighborhood Services Department. Reporting to the Director of Community and Neighborhood Services, a city employee or contractor will serve as the Residential Energy Advisor (REA) and be responsible for the daily management of HER.

REA management responsibilities include but are not limited to:

- Public education initiatives
- Staff training
- Homeowner program application(s)
- Budget management
- Metrics – creation and tracking
- Contractor recruitment
- Other duties as assigned

### Eligible Properties

All owner-occupied and rental single family, two family, three family and four family residential properties in the City of Holland are eligible for this program subject to the following conditions:

1. Buildings with more than four dwelling units will be reviewed on a case by case basis
2. The home must be affixed to a permanent foundation
3. The owner must submit a properly recorded Warranty Deed or Land Contract showing clear ownership by the applicant
4. City of Holland property taxes must be current
5. Special consideration will be given to properties that house low income occupants.

## Eligible Prime Contractors

Energy audits, energy efficiency improvements, renewable energy measures and related services must be performed or installed by a Michigan Saves Authorized Prime Contractor or their subcontractor. See [www.michigansaves.com](http://www.michigansaves.com) for a full list of eligible contractors.

The homeowner selected Prime Contractor will be responsible for both conducting the home energy assessment and for installing and/or managing the energy efficiency improvements to the home.

## Energy Assessment Standards

A comprehensive home energy assessment (audit) must be completed by an authorized contractor for each home entering the HER program. The assessment must meet the following requirements:

1. Creation of a scope of work which optimizes energy performance while concurrently ensuring (a) human health, comfort, and safety and (b) building durability as per established industry standards.
2. Calculation of the air changes per hour (ACH) rate at CFM<sub>50</sub>
3. Ventilation recommendation(s)
4. Measurement of all insulation depth(s)
5. Documentation of the major household appliances.
6. Completion of the Home Energy Retrofit Assessment Cover Sheet  
(Reference Appendix H)

If recommended by the assessment, health and safety measures **must be implemented**. Contractors must follow Section 802 of the RESNET standard for blower door test procedures when suspected asbestos or other hazardous materials are present.

## Eligible Improvements

Eligible energy efficiency improvements include any measure or piece of equipment that has energy savings documented in the Michigan Energy Measures Database (MEMD). See Appendix A for a list of eligible measures.

HER requires deep energy efficiency improvements following the loading schedule shown below. However, the Residential Energy Advisor will have the ability to modify the loading schedule and the depth of the improvements when necessary to address health and safety issues, structural concerns, or to meet HER Program goals.

HER Loading Schedule:

1. Air Sealing
2. Insulation
3. Mechanical Equipment
4. Appliances and Lighting
5. Windows and Doors
6. Renewable/Alternative Energy

HER will also support the remediation of pre-existing environmental hazards or the repair of physical/structural defects which create health and safety issues. HER will only approve these repairs if aligned with an appropriate efficiency measure, and if the cause(s) of the environmental hazard or physical/structural defect is eliminated.

All appliances and other replaced equipment must be disabled and taken out of service permanently, and must be either recycled or disposed of in accordance with local, state, and federal laws, codes, and ordinances. Appliances and other replaced equipment may not be re-used.

All work must be performed in accordance with all applicable federal, state, and local codes, standards and certifications. Contractors must obtain all required permits from local authorities.

Any remediation work must be performed by a contractor who is qualified, and in many cases, licensed for the task. Contractors should not attempt to remediate environmental hazards or to correct physical defects that they are not trained or qualified to repair. Doing so increases a contractor's liability and jeopardizes their participation in the HER Program. Authorized Contractors who are able to remediate environmental hazards should consider obtaining pollution occurrence (also called pollution liability) insurance to protect them from liability.

Homeowners can also use the Home Energy Retrofit Program for renewable energy measures like solar PV systems and solar thermal systems if the home meets certain energy efficiency standards. The home must have been evaluated by an authorized Department of Energy (DOE) Home Energy Score Assessor. The process starts with a Home Energy Score Assessor collecting energy information during a brief home walk-through. Using the Home Energy Scoring Tool, developed by Lawrence Berkeley National Laboratory, the Assessor scores the home on a scale of 1 to 10. A score of 10 indicates that the home has excellent energy performance. A score of 1 indicates the home needs extensive energy improvements. A score of at least 8 must be achieved to be eligible for renewable energy measures. Solar photovoltaic systems must comply with Holland BPW net metering interconnect policies in the Electric Service Net Metering Program.

For all solar PV system installations on residential structures, Authorized Contractors must also obtain appropriate city or municipal building permits. All solar PV installations must include a solar generation meter and meter enclosure. The solar PV system must comply with current Michigan Utility Generator Interconnection Requirements. Contractors must provide a copy of the interconnection agreement or of the authorization letter with the certificate of completion. At this time, residential wind turbines are not eligible for financing.

## Financial Incentives

The Home Energy Retrofit Program creates a partnership between the Holland Energy Fund and homeowners in order to improve homes, reduce energy use, and enhance the quality of life in Holland, MI.

Financial incentives are a key component of HER, designed to encourage deep home energy efficiency investments. Incentives will be offered in the form of a scaled project cost reduction. Financial incentives will be authorized within the budgets determined by the HEF board. Increasing incentive values will be calibrated to follow increasing homeowner investment.

Financial Incentive Framework:

1. No incentive will be awarded for investments less than \$10,000 per dwelling unit.
2. Incentivized investment is capped at \$30,000 per dwelling unit.

- Investment in the range between \$10,000 and \$30,000 will be eligible of a maximum incentive of 10%.

## Property Owner Commitment to Tracking Energy Use

As a participant in the HER Program and as such a beneficiary of the financial incentive, the property owner will enter into a Program Agreement with the HEF. As part of that Program Agreement the homeowner agrees to work with the REA in tracking their energy use for an agreed upon period of time no less than 12 months following completion of the project. Collecting this data will allow the City to gain a better understanding of the impact of this program.

## PROGRAM PROCESS

It is anticipated that many homeowners will learn about the HER Program from municipal contacts and HBPW's outreach efforts. In other cases, contractors will promote their affiliation with the program through marketing materials. Regardless of contact origin, the process remains the same.

### **Step 1: Education**

Through a series of community conversations, neighborhood, interest group and one-on-one meetings, the City of Holland Residential Energy Advisor (REA) will educate the public and potential authorized contractors on the benefits of deep energy efficiency improvements and the HER Program. As part of the education process the REA introduces the homeowners to potential authorized contractors who can perform the home energy assessment.

### **Step 2: Application**

The REA works with all homeowners applying for the program. During the application process the REA reviews the program guidelines, financing options and the whole process from initial application to final tracking of the results.

### **Step 3: Selecting a Contractor**

The homeowner selects an authorized prime contractor to conduct the home energy assessment. The REA is available for consultation.

### **Step 4: Conducting the Home Energy Assessment**

The selected authorized prime contractor will have the ability to conduct the home energy assessment within 10 business days of being selected and notified. The home energy assessment will conform to the standards of the HER as listed under the Program Components section.

### **Step 5: Selecting the Improvements**

The REA will work with the homeowner in determining which improvements will be made. The improvements will be prioritized according to the loading schedule listed under the Program Components section.

### **Step 6: Grant Agreement and Financing the Improvements**

The homeowner will sign the HER Grant Agreement (see Appendix G) and consult the REA when determining financing for the improvements

### **Step 7: Installation of the Improvements**

The homeowner will work with the selected contractor to ensure the improvements are installed as agreed; the REA is available for consultation. It is anticipated that the selected contractor will also be the same contractor that conducted the home energy assessment.

### **Step 8: Validating and Tracking the Results**

The REA will work with the homeowner to track energy use in the home as stipulated in the Program Components section.

## **CUSTOMER SERVICE**

Customer concerns regarding prime contractor services or questions about installed equipment should be directed to the contractor. The HEF encourages each customer to research the contractor's work through word of mouth, contractor ratings, customer networks (such as Angie's List), and the Better Business Bureau. The HEF cannot endorse or make any warranties as to the work and business practices of a contractor.

If a customer files a complaint with the HEF regarding a contractor's performance, workmanship, or professionalism, the HEF City of Holland will note the complaint in the contractor's permanent file and take appropriate action. Repeated customer complaints can result in a contractor's suspension or termination from the program. Please see the Quality Assurance section in the Michigan Saves Implementation Guide at [http://michigansaves.org/upload/file/resource/12\\_home-energy-loan-program-implementation-.pdf](http://michigansaves.org/upload/file/resource/12_home-energy-loan-program-implementation-.pdf) for detailed information on contractor status. If the property owner is using the On-Bill Loan Program to pay a portion of the project costs, they should direct any billing questions to Holland Board of Public Works at [www.hollandbpw.com](http://www.hollandbpw.com).

## **PROGRAM MARKETING**

The HEF Home Energy Retrofit Program will be administered by the City's Department of Community and Neighborhood Services. Program information will be provided to property owners in the City of Holland. Home Energy Retrofit Program marketing materials are available on the City of Holland website at [www.cityofholland.com](http://www.cityofholland.com).

- **At no time shall any authorized contractor represent its business as an agent or representative of the City of Holland.** Contractors may represent themselves as authorized contractors. Any contracts between the contractor and its customers or any third parties shall clearly and conspicuously express that no agency relationship exists between the contractor and City of Holland or the Holland Energy Fund.

## **PROGRAM EVALUATION**

The Home Energy Advisor will monitor the effectiveness and impacts of the HER program. Key metrics may include:

1. Number of projects
2. Project value (average and total)
3. Energy savings (average and total)
4. Budget use and/or compliance
5. Involvement of other related staff members
6. Reduced utility bills
7. Customer satisfaction

8. Taxable value

The City of Holland will have access to information regarding customer participation, measures installed, and utility savings in accordance with authorizations signed by participating customers.

## APPENDIX A: ELIGIBLE MEASURES LIST

The Michigan Energy Measures Database contains the most recent and ruling version of the list of eligible measures. The following table has been inserted for reference, adapted from the 2016 proposed measures as of 10/30/2015.

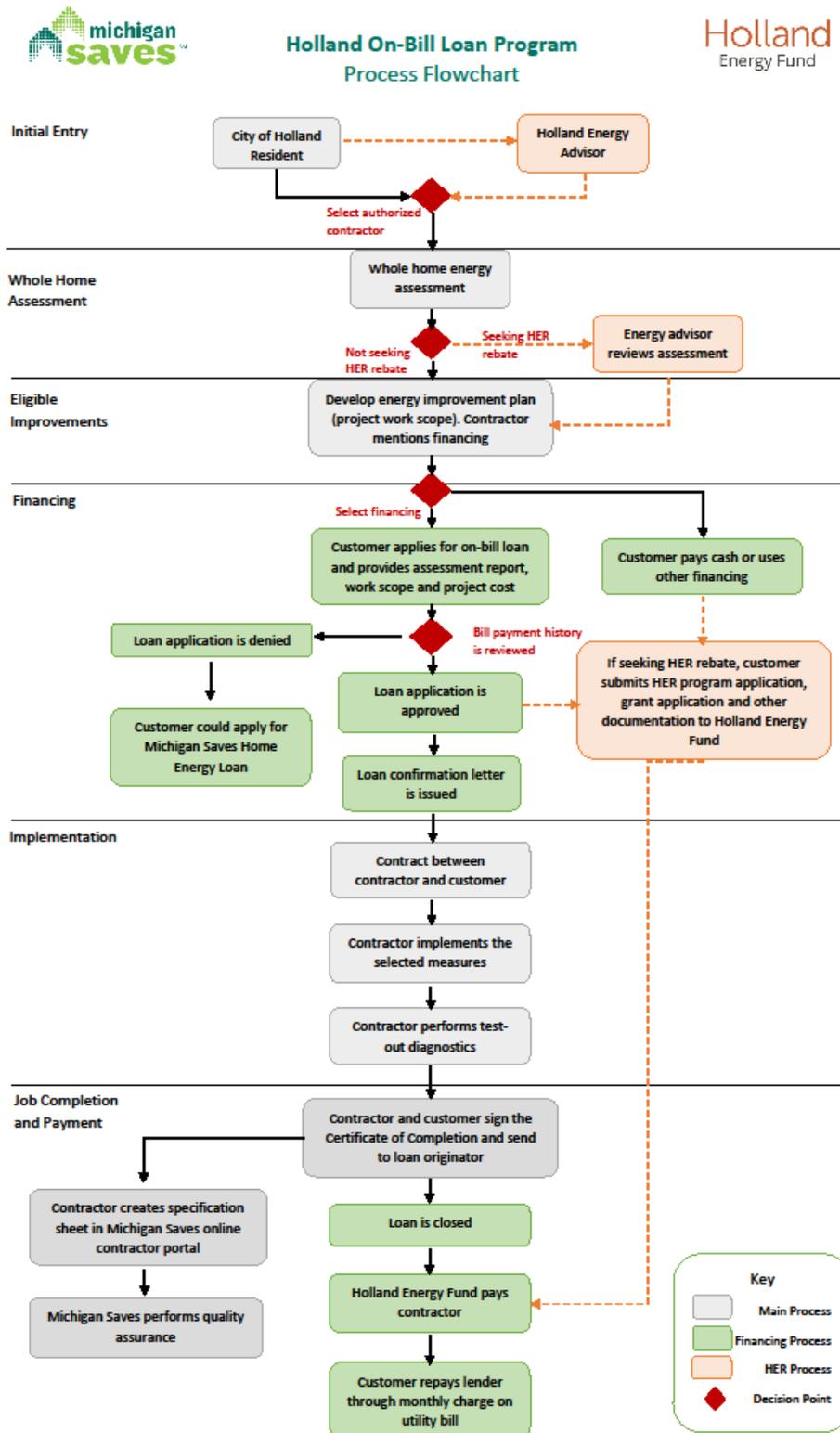
Visit this link for the most current and complete information: [http://www.michigan.gov/mpsc/0,4639,7-159-52495\\_55129---,00.html](http://www.michigan.gov/mpsc/0,4639,7-159-52495_55129---,00.html)

Electric/ Gas	Proposed Technologies for Measures Library	Proposed Efficiency Level	Measure Life
<b>Electric</b>	CFL bulbs	Compact fluorescent lamps, CFL Torchiere	9 - 12
<b>Electric</b>	CFL fixtures	Compact fluorescent fixtures	12
<b>Electric</b>	Cold Cathode lamps	Cold Cathode fluorescent lamps	25
<b>Electric</b>	LED bulbs	LED night light, indoor / outdoor lamps, A-line, Flood/PAR, Globe, Candelabra, and Holiday Lights	10 - 15
<b>Electric</b>	LED fixtures	LED downlights, Exterior fixtures	12 - 15
<b>Electric</b>	HPT8 4ft lamps replacing T12	HPT8 4ft 1 lamp, 2 lamp, 3 lamp, and 4 lamp	8
<b>Electric</b>	LW HPT8 4ft lamp replacing T12	HPT8 4ft 1 lamp, 2 lamp, 3 lamp, and 4 lamp	8
<b>Electric</b>	Occupancy Sensor	Control	10
<b>Electric</b>	ENERGY STAR Ceiling Fan	ENERGY STAR ceiling fan with CFL lighting	10
<b>Electric</b>	Heat Pump Water Heaters, <= 55 gallons	Heat pump water heater EF>=2.0	10
<b>Gas</b>	Gas Water Heaters	High-efficiency Gas Water Heater EF>= 0.67 – 0.80	13 - 20
<b>Elec&amp;Gas</b>	Pipe Wrap	Insulated Pipe with R2 – R5	11 - 15
<b>Elec&amp;Gas</b>	Low Flow Showerheads - gas water heater	Low Flow 1.75, 1.5, 1.25, 1.0, and 0.5 gal/minute	10
<b>Elec&amp;Gas</b>	Low Flow Kitchen and Bathroom Faucet Aerators - electric water heater	1.5, 1.0, and 0.5 gpm	10
<b>Gas</b>	Shower Start with Shower Head	Shower start technology with low flow showerhead 1.75 and 1.5 gpm	10
<b>Elec&amp;Gas</b>	Tub Spout with Showerhead	Tub Spout technology with low flow showerhead 1.75 and 1.5 gpm	10
<b>Elec&amp;Gas</b>	Shower Start	Shower start on existing showerhead	10
<b>Elec&amp;Gas</b>	Gravity Film Heat Exchanger GFX	40-60 ft GFX unit installed	20
<b>Electric</b>	Room AC	ENERGY STAR A/C unit, 11.3	12 -15

		EER, CEE Tier 1 A/C unit, 11.3 EER, CEE Tier 2 A/C unit, 11.8 EER	
<b>Elec&amp;Gas</b>	Furnace/AC, ECM Furnace	SEER 14 – 21, ECM Furnace	10 - 15
<b>Electric</b>	Pumps and Motors	High-efficiency pumps and motors, varying wattage	10 - 15
<b>Elec&amp;Gas</b>	Clothes Washer ENERGY STAR	Clothes washer IMEF= 2.22	11
<b>Electric</b>	Smart Strip plug outlets	Smart Strip plug outlet, Tier 2 Advanced Power Strip	5 - 8
<b>Electric</b>	Refrigerators ENERGY STAR	ENERGY STAR refrigerator	16
<b>Electric</b>	Freezers ENERGY STAR	ENERGY STAR freezer	21
<b>Electric</b>	Appliance recycling	Old refrigerator, freezer, room AC, or dehumidifier removed	8
<b>Electric</b>	Dehumidifier ENERGY STAR	ENERGY STAR Dehumidifier	12
<b>Elec&amp;Gas</b>	Dishwasher ENERGY STAR	ES High-efficiency Dishwasher	11
<b>Elec&amp;Gas</b>	Clothes Dryers	High-efficiency Clothes Dryer with Moisture Sensor.	14
<b>Electric</b>	Residential PV	1 kW PV system	20
<b>Elec&amp;Gas</b>	Solar Domestic Hot Water	Solar water heater	20
<b>Elec&amp;Gas</b>	Behavior Modification: Home Energy Reports	home energy reports	1
<b>Electric</b>	ENERGY STAR 6.0 TV	ENERGY STAR 6.0 TV	6
<b>Electric</b>	ENERGY STAR + 10% Display	ENERGY STAR + 10% Display	5
<b>Electric</b>	ENERGY STAR + 30% Display	ENERGY STAR + 30% Display	5
<b>Electric</b>	ENERGY STAR + 50 % Display	ENERGY STAR + 50 % Display	5
<b>Electric</b>	ENERGY STAR PC	ENERGY STAR PC	4
<b>Elec&amp;Gas</b>	Airtight Can Lights	Air tight can light	15
<b>Electric</b>	Central Air Source Heat Pump	SEER 14 – 21	15
<b>Elec&amp;Gas</b>	Central Dual Fuel Heat Pump	SEER 14 - 21	15
<b>Elec&amp;Gas</b>	Basement Wall Insulation	Varies	25
<b>Gas</b>	Boiler	87 – 95 AFUE	20
<b>Electric</b>	Cool roof	40% reflectance	20
<b>Elec&amp;Gas</b>	Crawlspace Wall Insulation	Varies	25
<b>Elec&amp;Gas</b>	Door Weather-stripping	Weather-stripped door	5
<b>Elec&amp;Gas</b>	Duct Insulation	Insulate to R-6	20
<b>Elec&amp;Gas</b>	Duct Location	Ducts within conditioned space	30
<b>Elec&amp;Gas</b>	Duct Sealing	Seal from baseline to 6%	18
<b>Elec&amp;Gas</b>	ENERGY STAR Door	ENERGY STAR Door	20
<b>Elec&amp;Gas</b>	Floor Insulation	Varies	25
<b>Gas</b>	Hot Water Temperature Reset	Reset control	15
<b>Elec&amp;Gas</b>	Infiltration Reduction	Varies	13
<b>Elec&amp;Gas</b>	Windows	Varies	25

<b>Elec&amp;Gas</b>	Programmable Thermostat	Varies	10
<b>Electric</b>	RCA Improvement	Nameplate SEER	5
<b>Elec&amp;Gas</b>	Rim Joist Insulation	R-20 rim joist foam insulation	25
<b>Elec&amp;Gas</b>	Roof Insulation	Varies	25
<b>Elec&amp;Gas</b>	Wall Insulation	Varies	25
<b>Electric</b>	Whole House Fan	Increase ventilation to 10 ACH	15

# APPENDIX B: PROCESS FLOW CHART



## APPENDIX C: ALTERNATIVE PROGRAMS FOR FREE OR LOW-COST HOME WEATHERIZATION

Program Title	Qualification	Services offered	Contact
<b>Weatherization Assistance Program (WAP) Through Michigan Department of Human Services</b>	Homeowners making up to 200 percent of the federal poverty level (about \$44,000 a year for a family of four).	Up to \$6,500 per home in energy efficiency upgrades such as insulation, air sealing, and furnace safety check.	Local community action agency or the Michigan Community Action Agency Association at 517-321-7500.
<b>Property Improvement Program (PIP) Through the Michigan State Housing Development Authority</b>	Homeowners with annual household incomes up to \$65,000 (\$74,750 in certain areas).	Loans from \$7,500 to \$50,000 for improvements that increase the value or safety of the home. Terms are 4, 6, or 8%, depending on income, over 20 years.	Call 517.373.1974 or visit <a href="http://www.michigan.gov/mshda">www.michigan.gov/mshda</a> , (click on Home Improvement) for details on how to participate.
<b>Utility rebate programs Through local electric or natural gas provider</b>	Must live within the service area of the utility offering the rebate.	Rebates on weatherization installations and energy-efficient appliances are available from most electric and gas service providers in Michigan.	Your electric or gas provider for details on the specific incentives offered.
<b>Homecor</b>	Single family, owner occupied, low income in the central city neighborhoods	\$3,000.00 for qualified repairs \$1,000.00 as a 1:1 matching grant for energy efficiency improvement measures	<b>Homecor</b> 151 Central Ave, Suite 280 Holland, MI 49423 <a href="http://www.homecor.org">www.homecor.org</a>
<b>City of Holland Home Repair Program</b>	Single family, owner occupied, low income households.	The City will pay ½ the cost of needed repairs up to \$4,000.00.	Call 616-355-1338 or visit <a href="http://www.cityofholland.com/housingandneighborhoods/home-repair-program">http://www.cityofholland.com/housingandneighborhoods/home-repair-program</a>

<p><b>City of Holland Central Neighborhood Enhancement Program</b></p>	<p>Single family and two family, owner occupied homes in the Central Neighborhood District, city taxes and mortgage up to date, home must be insured, willingness to have a five-year lien on the property in the amount of City assistance given.</p>	<p><b>The City will provide 50% of an enhancement project cost, up to \$4,000.00, to help homeowners enhance their homes.</b></p>	<p>Call 616-355-1338</p>
<p><b>City of Holland and Good Samaritan Ministries Landlord Energy Efficiency Upgrade Program</b></p>	<p>Single family and two family low income rental properties located in the District (bounded by 8<sup>th</sup> Street on the north, 24<sup>th</sup> Street on the south, Ottawa Ave. on the west, and Fairbanks Ave. on the east).</p>	<p>The City and Good Samaritan Ministries will provide financing for the installation of energy efficiency improvements as defined in MCL 460.963.</p>	<p>Visit <a href="http://www.cityofholland.com/housingandneighborhoods/city-holland-and-good-samaritan-ministries-landlord-energy-efficiency-upgrad">http://www.cityofholland.com/housingandneighborhoods/city-holland-and-good-samaritan-ministries-landlord-energy-efficiency-upgrad</a></p>
<p><b>Lakeshore Habitat for Humanity Home Repair Program</b></p>	<p>Homeowner must have reasonable credit history, no bankruptcy within two years of application, and must not be able to qualify for a conventional mortgage. Other stipulations apply.</p>	<p>Habitat for Humanity will grant an affordable loan to help fund home weatherization, energy efficiency upgrades, exterior painting, siding repair and handicap accessibility repairs.</p>	<p>Call 616-393-8001</p>
<p><b>Holland Energy Fund Home Energy Retrofit Program Income Qualified Grant</b></p>	<p>Homeowner must live within Holland city limits and complete a household income application.</p>	<p>\$5,000 for approved improvements. Homeowner matches the grant amount.</p>	<p>City of Holland Community &amp; Neighborhood Services Department 616.355.1330</p>

# APPENDIX D: HEF ON-BILL LOAN PROGRAM SAMPLE LOAN AGREEMENT

## APPENDIX E: REBATE PROGRAMS

### City of Holland

Visit the City of Holland website for housing assistance programs and other incentives.  
<http://www.cityofholland.com/generalpage/community-neighborhood-services>

### Holland Board of Public Works (HBPW)

Visit the Holland BPW website for the latest rebates and other incentives.  
<https://www.hollandbpw.com/homerebates>

### SEMCO ENERGY Gas Company

Visit SEMCO ENERGY Gas Company website for the latest rebates and other incentives.  
<http://efficiencyunited.com/residential/semco-energy-gas-company>

### Database of State Incentives for Renewables & Efficiency®

Visit the NC Clean Energy Technology Center website for a comprehensive source of information on incentives and policies that support renewables and energy efficiency.  
<http://www.dsireusa.org/>

# APPENDIX F: HER PROGRAM APPLICATION

## City of Holland Home Energy Retrofit Program

*Please complete and return to City Hall, 270 S. River Avenue, 3<sup>rd</sup> floor, Holland, MI 49423  
616.355.1330*

Owner(s) Name: \_\_\_\_\_

Owner(s) Address: \_\_\_\_\_ City/State/Zip: \_\_\_\_\_

Day Phone: \_\_\_\_\_ Evening Phone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Preferred method of contact (Email, cell phone, etc.): \_\_\_\_\_

Property Address: \_\_\_\_\_ # of units: \_\_\_\_\_

Is the property a rental property? \_\_\_\_ Yes \_\_\_\_ No

If the house is currently vacant, will the house be owner or tenant occupied? \_\_\_\_\_

If currently vacant, when will the house be occupied? \_\_\_\_\_

### REQUIRED DOCUMENTS: Applications without complete documentation WILL NOT be processed.

- \_\_\_ Copy of recorded warranty deed or recorded land contract
- \_\_\_ Copy of the declarations pages of your homeowners insurance policy WITH proof of payment
- \_\_\_ Copy of paid property taxes
- \_\_\_ Proof your mortgage is paid up to date
- \_\_\_ Estimates from contractor off the approved list

### PROGRAM REQUIREMENTS (including but not limited to):

- Applicants must sign a grant agreement and must be approved prior to the start of the work.
- Any properties owned by the applicant cannot be involved in court action
- All projects must be reviewed by the City staff team before being approved
- Funds will not be paid for work already started or completed.
- Applicants agree to monitoring of their utility bills for up to two years following completion of the retrofit project.

Owner's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# APPENDIX G: HER GRANT AGREEMENT

## City of Holland Home Retrofit Program

### GRANT AGREEMENT

This Grant Agreement, made this \_\_\_ / \_\_\_ / \_\_\_ (date) by and between the owner-occupant(s) \_\_\_\_\_ and the Holland Energy Fund witnesseth the following:

The Owner(s) of said property have made application to Holland Energy Fund for Home Retrofit Program funds in order to receive a grant for energy retrofit improvements and the Holland Energy Fund as a lender of Home Retrofit Program funds is willing to finance a portion of the proposed rehabilitation improvements to the owners property subject to the terms and conditions set forth in this Grant Agreement.

The Holland Energy Fund, through the Office of Community & Neighborhood Services, shall provide a grant not to exceed \$\_\_\_\_\_ for improvements to the property located at \_\_\_\_\_.

This above designated subsidy is provided subject to compliance with all of the following:

- A. Application. The application and supporting documents provided are true and correct in all respects.
- B. Program Guidelines. Home Retrofit Program guidelines of the City of Holland.
- C. Property eligibility. The property is an eligible "project" as defined by the City of Holland Home Energy Retrofit Program guidelines.
- D. Timeliness. **Project improvements must be started within 15 business days** of the date of this document. Failure to start the project within the specified time period will void this Grant Agreement unless a request for extension is granted by the City and the Holland Energy Fund for acceptable reasons or circumstances beyond the control of the owner.
- E. Completion. **All improvements and contract/billing paperwork shall be completed within 50 calendar days of the date of this agreement**. Failure to complete the project within the specified time period will void this Grant Agreement unless a request for extension is granted by the City and the Holland Energy Fund for acceptable reasons or circumstances beyond the control of the owner.
- F. Change Orders. Any change order(s) to the original work specifications and or drawings shall not be valid unless approved in writing and signed by all parties to this Grant Agreement.

G. Amendment/Modifications. No Amendment or modification of this Grant Agreement, and no waiver by any party hereto of any representation, or condition of this Agreement shall be valid unless in writing and signed by all of the parties to this Grant Agreement.

H. Indemnification. The Borrower shall and will at all times hereafter assume all liabilities for and protect, indemnify and hold harmless the City and the Holland Energy Fund from and against any and all damages, losses, claims, demands, suits, proceedings, judgments, awards, cost or expenses including attorney fees which the Holland Energy Fund may suffer, sustain or be the subject to, as a result of its implementation of this Agreement, and its monitoring of the rehabilitation improvements.

In witness whereof the parties have executed this Agreement on the day and year first written above:

Acceptance by owner(s)

Acceptance by authorized  
Holland Energy Fund Official

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# APPENDIX H: HER HOME ENERGY ASSESSMENT COVER SHEET

Date: \_\_\_/\_\_\_/\_\_\_

## Initial Interview:

Homeowner expressed goals & concerns:

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## Remediation Measures:

Asbestos: Yes: \_\_\_ No: \_\_\_ Knob & Tube Wiring: Yes: \_\_\_ No: \_\_\_ Mold: Yes: \_\_\_ No: \_\_\_  
/Vermiculite: Yes: \_\_\_ No: \_\_\_  
Structural Issues: \_\_\_\_\_

## Safety Issues:

Indoor Air Quality: \_\_\_\_\_  
Gas Leak: Yes: \_\_\_ No: \_\_\_ Ambient CO: \_\_\_\_\_ ppm Gas Stove/Oven CO: \_\_\_\_\_ ppm  
CAZ depressurization: \_\_\_\_\_ Pa CO Monitor: Yes: \_\_\_ No: \_\_\_  
Smoke Detectors: Yes: \_\_\_ No: \_\_\_

## Spot Ventilation:

Bath Fan #1: \_\_\_ cfm Bath Fan #2: \_\_\_ cfm Bath Fan #3: \_\_\_ cfm Kitchen Fan: \_\_\_ cfm  
Clothes Dryer- Properly vented: Yes: \_\_\_ No: \_\_\_

## Duct Sealing:

Filter Slot Cover: Yes: \_\_\_ No: \_\_\_  
Joints adequately sealed: Yes: \_\_\_ No: \_\_\_  
Insulation required: Yes: \_\_\_ No: \_\_\_

## Infiltration/Exfiltration:

cfm50: \_\_\_ ACHn \_\_\_ BTL: \_\_\_ Mechanical ventilation required: Yes: \_\_\_ No: \_\_\_

## Hot Water Tank:

Manf Date: \_\_\_ Gallon(s): \_\_\_ Energy Factor: \_\_\_ Draft: \_\_\_ Pa Spillage: \_\_\_ ppm

## Furnace:

Manf. Date: \_\_\_ AFUE: \_\_\_ Draft: \_\_\_ Pa Spillage: \_\_\_ ppm

## Attic:

Insulation Depth: \_\_\_ inches  
Access panel/door air sealed: Yes: \_\_\_ No: \_\_\_  
Air Sealing required: Yes: \_\_\_ No: \_\_\_  
Ventilation Measures Required: Yes: \_\_\_ No: \_\_\_

## Sill Plate:

Air sealing required: Yes: \_\_\_ No: \_\_\_  
Insulation required: Yes: \_\_\_ No: \_\_\_ Applied R-value: \_\_\_\_\_

## Wall(s):

Cavity Depth: \_\_\_ inches Existing R-value: \_\_\_ Cavity Fill Recommended: Yes: \_\_\_ No: \_\_\_

## Basement/Crawl-Space Walls:

Air sealing required: Yes: \_\_\_ No: \_\_\_  
Existing insulation: Yes: \_\_\_ No: \_\_\_ R-value: \_\_\_\_\_

# APPENDIX I: AUTHORIZED CONTRACTOR MEMORANDUM OF UNDERSTANDING

## City of Holland Community & Neighborhood Services HOME ENERGY RETROFIT PROGRAM Memorandum of Understanding & Contractor Application

I, \_\_\_\_\_ (name) of \_\_\_\_\_ (company), have received a copy of the City of Holland’s Home Retrofit Program Regulations. I have thoroughly read the document and agree to abide by all regulations listed therein.

I have also attached the following documents and agree to keep these records up-to-date with the City of Holland in order to stay on their contractor list:

- \_\_\_ a copy of the contractor’s license (if applicable)
- \_\_\_ a copy of the company’s Michigan Saves certification
- \_\_\_ a copy of the company’s liability insurance
- \_\_\_ a copy of workman’s compensation insurance (if you have employees)
- \_\_\_ a list of at least three local job references (clients)
- \_\_\_ a copy of the company’s RRP certificate

### PHONE NUMBER FOR ESTIMATES

\_\_\_\_\_

### EMAIL ADDRESS

\_\_\_\_\_

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

***Return all documents to:***

***City Hall – Community & Neighborhood Services, 270 S. River Ave., Holland, MI 49423***

# APPENDIX J: HER PROGRAM REGULATIONS

## CITY OF HOLLAND COMMUNITY & NEIGHBORHOOD SERVICES HOME ENERGY RETROFIT PROGRAM REGULATIONS

### **SECTION 1: Intent of the Regulations and Mission of the Program**

- 1.1 These regulations are set forth to define the foundation of the program, inform the residents and contractors about the expectations of participating in the Home Energy Retrofit Program and offer guidance to City Staff who manage the Home Energy Retrofit Program.
- 1.2 The Home Energy Retrofit Program was developed by the City of Holland to assist 1-4 unit residentially occupied homes make deep energy efficient retrofit improvements.

The mission of the HER is to provide an easy way to improve the homes in Holland Michigan, significantly reduce energy use and make Holland Michigan a better place to live. This is accomplished by:

### **SECTION 2: Eligibility Requirements**

To qualify for funding under the Home Energy Retrofit Program an applicant must meet the following requirements.

- 2.1 Home ownership  
The applicant must own a 1-4 unit residential property. The building must be affixed to a permanent foundation and the owner must submit a properly recorded Warranty Deed or Land Contract showing clear ownership by the applicant.
- 2.2 Taxes Paid  
The City of Holland property taxes must be paid up to date. The owner must submit proof of payment for the current year and the previous year of taxes. Tax statements and or receipts from the City and possibly the County will be required.
- 2.3 Insurance  
The property must be insured so as to cover the cost of the post retrofit replacement value. The owner must submit a certificate of insurance showing the property has adequate coverage and the policy is paid up to date.

2.4 Income  
Where applicable, the total household income must be submitted for each dwelling unit.

2.5 Walk Away Policy  
The City of Holland holds the authority to walk away from any project if it finds that the home and or homeowner are in violation of any of the instances listed below:

A. Code Compliance

Homeowners who are currently involved in court action with Community & Neighborhood Services or the City of Holland, or have outstanding code violations which are not being addressed by the program are not eligible for assistance.

B. Housing Maintenance

If Program Staff determines that the current condition of the home is in such a state that contractors and building inspectors will not be able to safely access and successfully complete the improvement project.

C. False Statements

If the applicant is untruthful during any part of the application process, including where applicable but not limited to, income verification, number of occupants in the home, living arrangements in the home, such as roommates paying rent, owner occupancy, etc.

D. Appeal of Staff Decisions

If the homeowner feels that they have been denied assistance due to Staff's decision under the Walk Away Policy, the homeowner may appeal this decision to the Neighborhood Improvement Committee at one of their regularly scheduled monthly meetings.

### **SECTION 3: Available Funding and Program Descriptions**

3.1 Each property going through the program will be eligible for a grant as follows:

A. No incentive will be awarded for investments less than \$10,000 per dwelling unit. Incentivized investment is capped at \$30,000 per dwelling unit.

B. Investment in the range between \$10,000 and \$30,000 will be eligible of a maximum incentive of 10%.

### **SECTION 4: Home Energy Retrofit Program Terms and Conditions**

4.1 City staff will act as a consultant to owners in determining what improvements should be done by assisting the owners in prioritizing each needed improvement. Using the results

from the authorized contractor's Home Energy Assessment, the City will follow a specific loading schedule.

- 4.2 No work may commence until the owner submits a signed Home Energy Retrofit Program application, signed grant agreement, contract documents, and the owner secures their portion of the funds toward the project.
- 4.3 Bid Solicitation:  
Homeowners will work with authorized contractors to obtain bids. The REA is available to assist.
- 4.4 Preparation of Contracts:  
Change orders are allowed, but they must be reviewed and approved by the City representative and the homeowner prior to starting the work in question.
- 4.5 Owner/Contractor disputes:  
In the event that a dispute between the owner/participant and the contractor cannot be resolved through normal negotiation and dispute settling techniques, the dispute will be referred to the Ottawa County Mediation Program, or the Neighborhood Improvement Committee at a regularly scheduled meeting. Review by the Committee will occur only if both owner and contractor submit forms explaining the situation and agree to abide by the decision of the Committee. If this conflict resolution process is not selected, the matter becomes a legal matter between the owner and contractor and will have to be settled in court. City Staff will issue an opinion and payment will not be made until a settlement is signed by both parties.

## **SECTION 5: Contractor Qualifications**

- 5.1 It is the intent of the Home Energy Retrofit Program to give all qualified contractors an opportunity to bid on all possible home retrofit projects funded the Holland Energy Fund. To this extent, the HEF has established the following qualifying criteria to determine whether or not a contractor is qualified to participate in our Home Retrofit Program:
  - A. If applicable, must be a licensed Contractor through the State of Michigan in their respective trade.
  - B. Must be listed as an authorized contractor under Michigan Saves.
  - C. For all work done under this Contract, all General and subcontractors are required to carry full Workers' Compensation Insurance, also Comprehensive Public Liability Insurance Coverage, protecting the owner for a minimum of the total cost of completing the retrofit improvements, and sufficient coverage in the event of any property damage arising out of their work. Evidence of this insurance must be furnished, if requested.
  - D. Provide three references reflecting the quality of their work.

- E. Have no substantiated and unresolved complaints against their work from any resident participating in the Home Energy Retrofit Program.
- F. Have no history of chronic failure to obtain permits or poor quality of work.
- G. Is not currently in arrears with the City of Holland for permit fees, taxes, and/or other penalties and fines.
- H. Only contractors who have signed a memorandum of understanding acknowledging the bid submission process and work standards listed above will be eligible to submit bids for City and Holland Energy Fund funded projects.

## GENERAL CONDITIONS

As required by the City and the Holland Energy Fund, the following "general conditions" will be included into all contract(s) with the property owner for the completion of the improvements.

These are as follows:

- A. Material, Labor and Appliances. Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, tools and equipment necessary to the completion of the improvements. The Owner will permit the Contractor, at no cost, to use existing utilities such as lights, heat, power and water necessary to the completion of the improvements to the Property.
- B. Insurance. All general and subcontractors on all work done under this contract with the property owner are required to carry full Workers' Compensation Insurance, also Comprehensive Public Liability Insurance Coverage, protecting the owner for a minimum of the total cost of completing the rehabilitation improvements, and sufficient coverage in the event of any property damage arising out of their work. Evidence of this insurance must be furnished, if requested.
- C. Codes, Permits and Regulations. The Contractor shall obtain and pay for all permits and licenses and shall give all notices, pay all fees and comply with all laws, ordinances, rules and regulations of the City of Holland, related to the completion of the improvements. If work of the Contractor is performed in violation of these laws, ordinances, rules and regulations, the Contractor will bear all costs arising therefrom.
- D. Protection of Work and Property. The Contractor will continuously maintain adequate protection for all his/her work from damage and shall protect any adjacent property from injury arising in connection with this contract. The Contractor shall make good any damages or injury. It shall be the responsibility of the Contractor to remove from the premises any and all debris or refuse resulting from the completion of the improvements.
- E. Assignment of Contract. The Contractor may not assign the Contract with the property owner for the completion of the improvements to the property without the prior written consent of the owner(s) and the City and the Holland Energy Fund. Any request for approval of an assignment of the contract must be directed to the City of Holland, Community & Neighborhood Services, at 270 River Avenue, Holland, Michigan 49423.

- F. Responsibility of Contractor and Subcontractors. The Contractor shall be responsible for satisfactory completion of the retrofit improvements in accordance with approved specification (and or drawings, if applicable). The Contractor (or subcontractors, if appropriate) shall provide without additional charge, all incidental items required for the completion of the rehabilitation improvements.
- G. Nondiscrimination. The Contractor must comply with all pertinent federal and local laws and regulations pertaining to equal employment opportunity as set forth in 24 CFR 92.350 and the Michigan Civil Rights Acts.
- H. Guarantees and Warranties. Neither final payment nor any progress payment shall become due until the Contractor has furnished the Borrower, with all manufacturer and supplier written guarantees concerning materials and equipment furnished under this contract, if requested. The labor and materials shall be warranted for at least a period of five years. This warranty does not apply if it is documented that the home owner neglected routine maintenance.
- I. Liens and Inspection. Final payment on the contract amount will be made, where applicable, only after contractor performed test-out diagnostics, submission of the Certificate of Completion signed by both the property owner and contractor, submission to Michigan Saves of the Specification Sheet, and any necessary quality assurance inspection. The City and the Holland Energy Fund must be permitted to examine and inspect all retrofit work, at any time with reasonable notice.
- J. Time Limits. Time being the essence of this Agreement; the Contractor must commence work within 15 business days of the date of the signed Grant Agreement. Work must be completed within 50 calendar days from the date of the Grant Agreement.
- K. Progress Payments. For Contractors performing multiple specifications, up to three progress payments can be received. The third progress payment must be the final payment to the contractor and be accompanied by waivers from the accepted contractor and other involved parties as well as guarantees for mechanical devices and other paperwork for closeout.
- L. Form of Payment of Contract. Payments will be made to the Contractor. Checks (initial, periodic, and final) will be in lump sum amounts after the requirements above have been satisfied. Normally, final payment will be disbursed within twenty (20) calendar days after the City and the Holland Energy Fund receives the Contractor invoices and satisfactory release of liens or claims for liens by subcontractor (if any), laborers and material suppliers for completed work or installed materials.

- M. Termination. If the Contractor fails to furnish materials to execute the work in accordance with the provision of the Contract with the property owner, or fails to proceed with or complete the work within the time specified in the Contract, or if the provisions of this Contract are otherwise violated by the Contractor, then in any case, upon ten (10) calendar days written notice to the Contractor, the Owner(s) and the City and the Holland Energy Fund shall have the right to declare the Contractor in default of his/her obligation under this Contract. Any notice of a default shall contain the reasons for the Owner(s) and City's decision to declare the Contractor in default. If such default continues for an unreasonable length of time, the City and the Holland Energy Fund, with the approval of the Owner, may terminate the Contractor's right to proceed under this Contract.
- N. Conflict Resolution. The City and the Holland Energy Fund, through the Community & Neighborhood Services Office shall, within a reasonable time, make decisions on all claims of the Owner and/or Contractor and/or all matters relating to the quality and progress of the work or interpretation of the contract documents.
- O. Contractor License Requirement. All Contractors are obligated to furnish a copy of their State of Michigan Contractor License to the permit Section of the Community & Neighborhood Services Office of the City of Holland prior to the start-up of any work under this Agreement.
- P. This Contract is intended to govern the rights of the Owner and Contractor between themselves, and all references to the City and the Holland Energy Fund as a Lender in these General Conditions to the Contract are made to satisfy obligations of the Owner to the Holland Energy Fund based on the Grant Agreement entered into by and between the Holland Energy Fund and Owner(s). Parties to the Contract(s) for the retrofit improvements acknowledge and agree that the incorporation of the "General Conditions" into the Contract constitute an inducement to the City and the Holland Energy Fund, to make the loan, but these general conditions shall not be construed to make the City and and the Holland Energy Fund a party to the Contract, or construed to bind or obligate the City and and the Holland Energy Fund, except as set forth in its agreements with the Owner(s).

# APPENDIX K: Consumption Data Release Form

## Consumption Data Release Form



### ACCOUNT LOCATIONS

Address	HBPW Account #	SEMCO Account #

List any additional account locations on a separate sheet.

### CONTACT INFORMATION

Name	Organization		
Address	City	State	Zip
E-mail		Phone	

I give permission for Holland Board of Public Works and SEMCO ENERGY Gas Company to release historical utility data for the locations listed on this form. I understand this information will be used solely for the purpose of the City of Holland's Home Energy Retrofit Program.

Signature \_\_\_\_\_

Date \_\_\_\_\_

## APPENDIX L: ACRONYMS

CEP	Community Energy Plan
EUI	Energy Use Intensity
HBPW	Holland Board of Public Works
HEF	Holland Energy Fund
HER	Home Energy Retrofit Program
HERTF	Home Energy Retrofit Task Force
MEMD	Michigan Energy Measures Database
REA	Residential Energy Advisor