Energy Waste Reduction Low Income Workgroup



June 13, 2024





Welcome	Brad Banks, Energy Waste Reduction Section, MPSC
Detroit Contractor Accelerator Program	Crystal Bernard Elevate
Green Home Institute and Holland Board of Public Works: West Michigan Housing and Energy Efficiency Program Reports	Brett Little Green Home Institute Andrew Reynolds Holland Board of Public Works
Energy Efficiency/Green Energy Workforce Needs Assessment Survey	Ben Dueweke Walker-Miller Energy Services Jonathan Clark Walker-Miller Energy Services
Close & Adjourn	Brad Banks, Energy Waste Reduction Section, MPSC

Detroit Clean Energy Contractor Accelerator

EWR Low-Income Workgroup June 13, 2024



Agenda

- Welcome
- Project Details & Overview
- Project Scope, Objectives & Workflow
- Project Team & Timeline
- Cohort 2 Overview
- Discussion

Elevate's Mission

We design and implement programs that reduce costs, protect people and the environment, and ensure the benefits of clean and efficient energy use reach those who need them most.



Project Details & Overview

Project Details

- Funder: General Motors Climate Equity Fund
- Grant Period: November 1, 2023- October 31st, 2024
- Award: \$325,000
- Team Members:
 - O Crystal Bernard, Project Manager
 - Kamilah Outlaw, Former PM/Advisor
 - o Tim Skrotzki, Advisor





Project Overview

The Detroit Clean Energy Contractor Accelerator supports Black and Brown contractors in expanding their opportunities in the clean energy industry while leveraging funds and demonstration projects to develop resilience hubs. We help contractors grow their businesses through solar, battery, building electrification, and EV projects, providing support services, training, and mentoring. We prepare the Detroit workforce for federal climate action Inflation Reduction Act funds.

Elevate recognizes the lack of diversity in contracting firms in the clean energy space as a result of generations of systemic oppression and takes a long-term approach for success. Elevate serves as a bridge to the clean energy economy, educating building owners, contractors, and communities on climate change and strategic actions we can take to mitigate it.



Project Scope, Objectives and Workflow

Project Scope



Identify BIPOC contractors interested in the clean energy industry such as solar developers, electricians, and other infrastructure services

(cohort of 5)



Our team will provide support services and train contractors for solar, battery, and EV projects to support the Resilient Eastside Initiative and other Detroit projects



Manage the process to determine program impacts on BIPOC businesses based on opportunities in the clean energy industry, building generational wealth

Project Objectives



Five diverse contractors served through BIPOC Contractor Accelerator with a focus in clean energy services



Position BIPOC contractors to increase revenue that will increase the clean energy workforce in Detroit Conduct a program evaluation, support Resilient Eastside Initiative project implementation, and support contractor growth

Project Workflow

Contractor Development Pathway





Project Team & Timeline

Project Team

Resource	Task
Crystal Bernard	Project Manager
Kamilah Outlaw /Tim Skrotzki	Former Project Manager / Contractor Accelerator Support Manager
Henry Love / Vito Greco/ Jake Archbell	Senior Leadership / Solar Expertise/Helioscope Training
Michigan Minority Contractors Association	Growth Plan / Mentoring
Eastside Community Network / Brilliant Detroit / Detroiters Working for Environmental Justice / Michigan Energy Efficiency Contractors Association	Community / Industry Stakeholders
Ryter Cooperative Industries / OPConnect	Solar plus Battery Training / EV Infrastructure Training

Timeline

Timeline Proposed in Resubmission						
	2023	2024				
Key Activities & Milestones	Q4	Q1	Q2	Q3	Q4	
Consult stakeholders to refine approach	x	х			x	
Engagement and recruitment	х	х				
Cohort selection and orientation		х				
Training and education Sharing			х	х		
Demonstration Projects			х	х	х	
Ongoing data collection			х	х	х	
Reporting			х		х	



Cohort 2 Overview

Cohort 2 Curriculum

Training Topic	Trainer	Location	Month			
Emerging Clean Energy Economy	Elevate	Virtual	March			
Project Readiness Part I: Growth Plans	Michigan Minority Contractor Association	Virtual	March			
Solar Project Management Training - Helioscope	Elevate	Virtual	April			
Overview of EV Infrastructure – EV Infrastructure 101	OpConnect	Virtual	May			
EV Infrastructure In Person Event – Hands on EV Infrastructure Training	OpConnect	In-Person, Detroit	June			
Remaining Trainings & Events						
Overview of Solar and Battery Storage – Fundamentals of Microgrid Design	Ryter Cooperative Industries	Virtual	June			
Battery and Storage In Person Event – Hands On Solar and Battery Storage Training	Ryter Cooperative Industries	In-Person, Detroit	July			
Cohort Graduation		In-Person, Detroit	September			

Successes and Lessons Learned

SUCCESSES

- Expanded original program offerings
 - Added two additional training courses on solar project management
 - Solar software training
 - Solar financial management training
 - Offering an optional Mitsubishi HVAC-Heat Pump Training for contractors

LESSONS LEARNED

- •Keeping contractors engaged and participating has been a challenge.
 - Example: A contractor not engaging with partners to complete required growth plans or attending scheduled virtual workshops.
- •Addressing the issue:
 - Conducted one-on-one meetings with contractors to collaboratively schedule training.
 - Identified additional resources needed for their participation.
 - Adopted a non-punitive approach:
 - Allowed those who cannot attend a session to watch the recording.
 - Provided guided feedback on the recordings.
- •Results:
 - Contractors can engage with the program at a feasible level.
 - Increased both in-training and out-of-training engagement.
 - Provided a more tailored experience throughout the program

Additional Project Offerings

Certification and Additional Opportunities Offered to Contractors:

- Helioscope Software License
- Midwest Renewable Energy Association NABCEP PV Associate Credential
- EVSE Certification
- Mitsubishi Heat Pump Training
 - (Note: Someone on staff must be HVAC Certified per Mitsubishi Requirements)



Any Questions?

Stay Connected

• Upcoming Stakeholder Meetings

- July 25th from 1-2pm
- September 26th from 1-2pm

• Stay tuned for a D-CECA Contractor Highlight Document

Contact information

Kamilah Outlaw

Kamilah.Outlaw@ElevateNP.org

313.686.2523

Crystal Bernard

Crystal.Bernard@ElevateNP.org

313.770.7564





	ElevateNP.org
--	---------------

- info@ElevateNP.org
- @ElevateNPOrg
- ØElevateNPO
- @ElevateNP







Andrew Reynolds Community Energy Services Manager

Holland Board of Public Works areynolds@hollandbpw.com 616-355-1540 Holland Energy Fund

Outline

- HBPW overview
- Old programs
- New programs
- Measuring success
- Next steps
- Sharing our experiences









HBPW Rebate Programs

Heat Pumps

- Energy Star appliances
- Appliance recycling
- New construction

- Electric Tools
- EV Chargers
- Induction Cooking
- Panel Upgrades



Glossary

<u>Entities:</u> HBPW = Holland Board of Public Works HEF = Holland Energy Fund

<u>Old Programs:</u> HER = Home Energy Retrofit (grant) LMB = Lower My Bill (walkthrough) OBL = On-Bill Loan (discontinued)

<u>New Programs:</u> HE101 = Home Energy 101 BE = Beneficial Electrification





Old Programs – Challenges

- Lack of access
 - Spend ≥\$10,000 to get 10-20% grant (≥\$5,000 for on-bill loans)
 - Not available to renters
- Lack of "deep energy savings"
 - All measures on MEMD were available to residents
 - Grant not scaled to energy impact (windows = heat pump?!)
- Contractors
 - Consistency & quality of reports
 - Perceived bias
 - Training challenges































The resident chooses who they want to conduct the in-home energy education visit









	City of Holland	BPW Elec Service Area	Home Walkthrough	Free Energy Measures	Rebates	Grants
BRW ENERGY SMART						
HOME ENERGY 101						
Home Energy Retrofit						
GREEN PROJECTS GROUP						



Old Process – EXAMPLE – Water Heater

- Apply for Home Energy 101
- Complete HE101 visit
- Decide to upgrade water heater
- Get quote from contractor
- Apply for HER grant
- Complete the work
- Apply for BPW rebate
- Apply for IRA rebate? (timing TBD)







Holland Energy Fund Rebates



- Air Sealing (20% of eligible project costs)
- Insulation (20% of eligible project costs)
- Heat Pump HVAC (up to \$4,000)
- Heat pump water heater (up to \$300)
- Full home energy audit by 3rd party (10% of cost)



= same as HBPW rebate, so resident can double their total rebate: e.g. Heat Pump HVAC = up to \$8,000 (before IRA rebates/credits)



New Combined Rebate Process

- Updated the HBPW residential rebate application form to add a HEF section
 - HBPW staff review eligibility for any HEF applicants and process any HEF rebates just like they do for HBPW rebates
 - HBPW cuts a check to the resident or contractor for the HEF rebates
 - HBPW invoices HEF quarterly for all rebates paid out



HEF Incentives – Then and Now

- Used to require an audit now just HE101 visit required
- Used to include any measures on MEMD now just a select few
- Used to require specific contractor(s) now any licensed contractor
- Used to have \$10,000 project minimum now no minimum
- Used to be a grant before work commenced now rebate after





First Year Statistics





Average HER/OBL Participant

Multiple weeks and qualifying steps

\$2,500

\$15,000

600 kWh + 115 therms

\$3.50-\$7.00

Cost to City/BPW Cost to Resident

Application Process

VS.

Energy Savings

City Cost/kWh Saved



BPW



Net customer costs

~

+\$ 1,500 per year





Net customer costs

~

-\$ 200 per year





% of homes that saved electricity in Year 1 : 72%

% of homes that saved natural gas in Year 1 : 76%

% of homes that saved money in Year 1 : 83%







Next Steps

- We have developed a pilot Home Energy <u>201 program to help</u> residents install the types of measures we give in the HE101 kit
 - Air Sealing: Caulking, weather stripping, duct sealing, gaskets
 - Efficiency/safety: LED bulbs, thermostats, CO/smoke detectors
 - Some of the same non-profits are serving as installers, plus some contractors
 - HEF/HBPW provides materials and pays installers
 - Targeting outreach to residents with need identified during HE101 visits
 - Pilot will be 100% free for residents (future costs TBD)

Sharing our experience

- We intentionally developed HE101 as a model that other communities could use, whether or not they have an entity like Holland Energy Fund
- With the help of the University of Michigan's Graham Sustainability Institute, we have developed a guidebook for others to follow if they want to set up a similar program:

https://graham.umich.edu/media/files/Residential-Energy-Efficiency-Guidebook.pdf

Guidebook

Phase One ~ 4 Months

Phase One of the project spanned approv four steps were completed:

- Define Objectives: Identify what you city energy goals, residential know knowledge.
- Program Assessment: Review existi them into the initiative, considering b
- Engage Energy Suppliers: Identify ar community-saving objectives. Explore resources, evaluate potential free en the program.
- Budget Development: Create a compliant into account various elements such training and materials, payment for promotional materials, and internal la

Phase Two ~ 6 Months

Phase Two spanned approximately six months, consisting of the following steps:

- Nonprofit Partners: Identify and connect with local nonprofit organizations. Provide program information and initiate preliminary meetings to assess interest in collaboration and bandwidth.
- Process Development: Establish processes and responsibilities for program support and management, including scheduling and report creation.
- Partner Processes: Create processes to guide partner organizations in assisting participants.
- Training Development: Develop training programs for partners, leveraging expertise from energy suppliers, nonprofits, and external experts. Local colleges may also be a resource to help create materials.
- Informational Materials: Prepare <u>folders and informational materials for residents</u>, including details on available rebates, local and federal programs, and relevant nonprofit initiatives. Create marketing materials to share with residents to raise program awareness.
- Report Creation: Develop a <u>customizable report to send to residents</u> after completing an home energy education session.

Guidebook

The set up and management expenses for the first year of Holland's program totaled \$73,533 in 2022-2023. Participation is growing during the program's second year, so program management expenses for 2023-2024 are expected to be \$90,702. These costs are detailed below:



Guidebook

🛆 Drive	Q Search in Drive		∃≓		
+ New	Program Processes -				
Home	X 1 selected 😫 🗄 🔟	← → C ⋒ ² docs.google.com/presentation/d/	HLW1QZ57dQEzZp217RZvQPdMDFwc6AJD/edit#slid	le=id.p1	
My Drive	Name ↑ W [Home Energy 101] Educator Process	M Gmail ♥ Maps B Home - HBPW ♥ City of Holland - Ho [Home Energy 101] One-Day Training - Sum File Edit View Help Q Menus 日 ♥ ♥ Wiew ♥	Property Mapping 4 Adviso Infor EAM - L mer 2023 PPTX A Adviso Content of Conten	Log In 🔹 Home - Holland Bo 💽 QR Code Generator 🛛 🔇 Car	mpaigns Mailchi 📴 Home Energy 101 🗘 Mete
Shared with me ③ Recent ☆ Starred	🔤 Home Energy 101 Workflow.pdf 🕰				
 Spam Trash Storage 		2 3 Where the Where	HOM	E ENERG'	$Y[1_0]$
		4 Constrained from a strained for a strained from a strained	Holland Michigan	Holland Energy Fund	BP:W
		4 Image: Comparison of the second of the	Holland MICHIGAN	Holland Energy Fund	BPU

Thank You!







Andrew Reynolds Community Energy Services Manager

Holland Board of Public Works <u>areynolds@hollandbpw.com</u> 616-355-1540 Holland Energy Fund

MICHIGAN ENERGY EFFICIENCY & ELECTRIFICATION

WORKFORCE NEEDS ASSESSMENT

"The state's transition to clean energy, in addition to the federal dollars Michigan is bringing home to support transformative projects, is creating new and exciting opportunities for businesses and workers across our state,"

Susan Corbin, Director of the Michigan Department of Labor and Economic Opportunity.

BACKGROUND

Mid-2022: MPSC begins convening EWR Workforce Subcommittee.



Recurring discussions around the lack of hard data around workforce.



IRA Training for Residential Energy Contractors (TREC) funding guidance calls for the following to be included in state applications:

Provide a statement of need that clearly articulates the current supply of qualified skilled energy efficiency workers compared to the projected future demand.

OBJECTIVE STATEMENTS

<u>What</u>: Address the growing need for skilled energy efficiency and electrification contractors and trades professionals in Michigan's clean energy transition.

<u>How</u>: Conduct a **data-driven Needs Assessment** to comprehensively characterize the projected workforce needs and barriers in the residential energy efficiency and electrification sector.

<u>Why</u>: Provide statewide workforce development stakeholders with insights into specific skill sets, roles, and geographic needs, ensuring efficient deployment of federal funding from the Supplemental Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA), an expediting the delivery of clean energy benefits to all Michigan residents.



- **1. ESTABLISH APPROACH**
- 2. DEVELOP BASELINE SURVEY

3. DEPLOY BASELINE SURVEY

4. DEVELOP REGIONAL ENGAGEMENT

5. DEPLOY REGIONAL ENGAGEMENT

6. DATA AGGREGATION + REPORTING

ENERGY EFFICIENCY & ELECTRIFICATION WORKFORCE NEEDS ASSESSMENT WORKGROUP

PROPOSED TIMELINE



SURVEY DEVELOPMENT

A	в	C	D	E	F
Intended Audience	Question	Question Description (if applicable)	Response Type	Options (for multiple choice)	Required
				-None -Other	
C, AGC	Is your organization looking to grow in scale/size		Multiple Choice (Select One)	-Yes -No -Maybe	Y
C, AGC	Does your organization plan to expand into other services?		Multiple Choice (Select One)	-Yes -No -Maybe	Y
C, AGC	Do you have a growth plan established?		Multiple Choice (Select One)	-Yes -No -In Progress /Working on one	Y
C, AGC	Do you currently participate in the Weatherization Assistance Program (WAP)?		Multiple Choice (Select One)	-Yes -No -I don't know	Y
C, AGC	Are you interested in applying for and completing projects for Federal, State and/or Local Funding? (In addition to what you're already working on)	(Weatherization Assistance Program, Home Energy Rebate Program, Etc.)	Multiple Choice (Select One)	-Yes -No -Not Sure	Y
C, AGC	Do you have the capacity to apply for and complete projects for Federal, State, and/or Local Funding? (In addition to what you're already working on)	(Weatherization Assistance Program, Home Energy Rebate Program, Etc.)	Multiple Choice (Select One)	-Yes -No -Not Sure	Y
C, AGC	Do you anticipate losing staff members in the next 1-3 years to retirement?		Multiple Choice (Select One)	-Yes -No -Not Sure	Y
AGC	Do you anticipate losing contractors in the next 1-3 years to retirement?		Multiple Choice (Select One)	-Yes -No -Not Sure	Y

NEXT STEPS + QUESTIONS

NEXT MEETINGS

Tuesday June 18 – Full Group Tuesday June 25 – Planning Team Tuesday July 2 – Full Group Tuesday July 9 – Planning Team

CONTACT:

dueweke@wmenergy.com jjclark@wmenergy.com

Close & Adjourn

Thank You!

