

West Michigan Healthy Climate Plan: Establishment of the West Michigan Solar Consortium and Low Income and Disadvantaged Community Energy Efficiency Revolving Fund and Resource Hub

Section 1: Overall Project Summary and Approach

Grand Valley Metropolitan Council (GVMC) will utilize the Climate Pollution Reduction Grant (the “Grant”) award to implement two (2) GHG Reduction Measures (each a “Measure”). The two Measures are:

- Measure 1: Municipal Solar
- Measure 2: Low Income and Disadvantaged Community Energy Efficiency Revolving Fund (LIERF).

Each Measure will reduce regional greenhouse gas (GHG) emissions and benefit regional low income and disadvantaged communities (LIDACs) in the Grand Rapids – Kentwood Metropolitan Statistical Area (MSA). Measure 1: Municipal Solar aligns with West Michigan Healthy Climate Plan: Priority Climate Action Plan (PCAP) measure 1.1 Reduce the carbon intensity of stationary energy. Measure 2: LIERF aligns with PCAP measure 1.2 Improve building energy efficiency. Both Measures reduce GHG emissions in the stationary energy sector which is the highest emitter of GHG in the MSA at 20,543,437 metric tons CO₂ equivalent (MT CO_{2e}) emitted annually.

GVMC will establish the West Michigan Solar Consortium (WMSC) to implement and manage both Measures. In the case that a local government in the MSA receives CPRG funding for a project that would otherwise be eligible under this program, such a project would expressly not be eligible for funding under this proposed program. The revenue generated by Measure 1 will enable Measure 2 to be financially sustainable beyond the grant period.

1.a Description of GHG Reduction Measures

The West Michigan Solar Consortium

GVMC will establish the WMSC as a 501(c)(3) to manage both measures. Concurrently GVMC will hire one full time employee, a WMSC Program Coordinator, to manage the WMSC. The WMSC Program Coordinator (the “Coordinator”) will be employed by GVMC. The Coordinator will report to the WMSC Board, which will consist of a representative from each Municipal Partner and at least one LIDAC representative from each county in the MSA. The Board governance structure and WMSC strategic plan will be developed by the Coordinator with assistance from a non-profit strategy advisory firm.

Measure 1: Municipal Solar Description

Up to \$6,110,580 of the Grant award will be used to install design, permit, install, and maintain photovoltaic (PV) arrays on the property of Municipal Partners. The Municipal Partners and WMSC will enter into a power purchase agreement (PPA) stipulating that each Municipal Partner will purchase the electricity produced by the PV array at an agreed upon price. The WMSC will hire a renewable energy consulting agency to advise on the entire process involved with Measure 1.

Municipal Partners

WMSC will release a request for qualifications (RFQ) for public agencies, including municipalities and townships, to join the WMSC. The RFQ will include minimum requirements for submission. The minimum requirements will be formally established by the WMSC with technical support provided by the energy consultant. Below is a tentative list of minimum requirements that are subject to change:

- The respondent must own a building in the service area of one of the following utilities: Consumers Energy, Great Lakes Energy, Holland Board of Public Works, or Grand Haven Board of Power and Light.
 - The respondent is willing to lease space for the installation of a PV array for \$1 a year for the life of the PPA.
 - The building must consume a minimum of 190,000 kWh of electricity annually.
 - The building must be adjacent to 1.5 acres of unobstructed, unshaded, continuous ground space owned by the same entity.
- OR
- The building must have 35,000 square feet of open, unshaded flat rooftop with a minimum of 15 years of remaining life.

The RFQ will at least request that respondents provide the address, building voltage service, twelve (12) months of utility bills. The WMSC and the energy consultant will review RFQs to identify the best possible locations for PV array installation. An onsite audit by the energy consultant may be necessary before final selections are made.

The WMSC will select multiple locations to install PV arrays based on the economic feasibility of the array location. The two major factors that will be considered for site selection are cost of installation (\$/Watt DC) and PPA rate (\$/kWh). The WMSC and energy consultant will agree on a PPA rate with a potential partner prior to final selection. GVMC will leverage existing relationships with its municipal partners to solicit interest in the program. GVMC has secured letters of commitment (attached) to ensure success in deploying solar across the entire MSA from the following entities:

- City of Grand Haven
- City of Grand Rapids
- City of Grandville
- City of Holland
- City of Kentwood
- City of Walker
- City of Wyoming
- Kent County Road Commission
- Kent County
- Michigan Department of Environment Great Lakes and Energy
- Ottawa County

Power Purchase Agreement

The WMSC and energy consultant will develop a physical PPA for each site selected from the RFQ process. The WMSC will be the asset owner in the PPA, and the Municipal Partner will be the offtaker. The PPA will outline the electricity purchase price. The purchase price will be between 0% and 10% less than the offtakers current incremental utility rate. The PPA will contain a fixed to low escalation rate (0%-1.5%). Environmental attributes associated with solar generation in the form of renewable energy certificates

(RECs) will be retained by the offtaker¹. The PPA will further specify that municipal partners will not sell any RECs associated with the generation of solar electricity from the PV arrays. The WMSC will retain the 30% direct pay federal incentive (see section 1.b for details related to direct pay).

PV Array Construction

The energy consultant hired by the WMSC will lead the design, permitting, and installation of all PV arrays, including the selection of sub-contractors. The energy consultant will be required to comply with federal requirements associated with implementation of the Grant such as the Build America, Buy America Act and the Davis-Bacon Act. Additionally, the energy consultant will be directed to give preference to sub-contractors that meet one or of the following criteria:

- Provide family sustaining benefits and retirement contributions;
- Use of second-chance hiring policies, or the practice of hiring individuals with a criminal record, to expand opportunity for individuals with justice-system involvement;
- Benchmarks and goals to hire individuals from LIDACs, in alignment with applicable law.

Revenue

WMSC will use the revenue generated beyond the grant period, and over the lifetime of the PPAs to fund the salary and overhead of the Coordinator. In addition, revenue generated from the solar arrays will be utilized for costs associated with maintaining the PV arrays over the lifetime of the arrays. Remaining revenue will be transferred to the LIERF for purposes of implementing energy efficiency programs in LIDAC communities described in Measure 2 in greater detail.

Measure 1 Assumptions and Risks

Power Purchase Agreement Electricity Purchase Price

The purchase price paid by a partner for electricity generated by solar arrays deployed through Measure 1 is one assumption that could pose a risk in the event the WMSC only receives bids for a below-market purchase price. Energy prices are constantly in flux due to a variety of external factors impacting the marketplace for the purchase of energy such as peak demand and the price of combustible fuels used in energy generation. GVMC has mitigated this risk by performing a case study demonstrating feasibility and the likelihood of securing a certain price per kWh; however, the risk remains that potential partners may want to renegotiate on price due to the external factors referenced above. GVMC would work to mitigate this risk by securing additional partners and expanding the installation beyond strictly municipal buildings.

Utility Cooperation

Utilities may be reluctant to allow interconnection to the grid for solar arrays of a certain size or certain cities may have zoning restrictions on the use of solar in certain locations. In the event construction of the PV arrays is delayed due to conflicts with a utility, zoning restrictions, or other unforeseen circumstances, the greenhouse gas emission reductions associated with the installation of the solar arrays would be negatively impacted. However, this risk is mitigated by the ability of GVMC to work with multiple partners in deploying multiple solar arrays across the entire MSA that meet the necessary criteria.

Municipal Partner Availability

Energy needs for a given municipal entity may vary depending on many factors as discussed above. It is possible that the energy needs for one of the municipal partners selected by GVMC may dictate that they

¹ Subject to change

no longer need or want to purchase electricity through the WMSC. In this case, the WMSC can address this risk by seeking out additional non-municipal partners whose energy demands meet the specifications of the PV arrays deployed by the WMSC.

Measure 2: Low Income and Disadvantaged Community Energy Efficiency Revolving Fund (LIERF) Description

GVMC and WMSC will work together to create the LIERF and resource hub as part of Measure 2. The fund will provide financial support to low income and disadvantaged individuals for energy efficiency upgrades to existing buildings also known as building “weatherization”. The fund will include an income threshold that ensures only low income and disadvantaged individuals benefit from the funding. The definition of LIDAC communities in the MSA were defined in the PCAP, and will remain the same for this implementation grant program.

Funding Distribution

Funds originating from the purchase of solar electricity described in Measure 1 will be distributed from the LIERF to LIDACs as grants in two phases. Funds granted through the LIERF will follow CPRG Implementation requirements/eligibility.

- Phase 1 Grants: LIERF Phase 1 Grants will be funded through the CPRG Implementation Grant Program. At least \$2,754,000 of the total CPRG award will be distributed through Phase 1 Grants. Phase 1 Grants will be used for energy efficiency upgrades for LIDAC residents and business owners and include gap funding for current decarbonization initiatives in the MSA in LIDACs.
- Phase 2 Grants: LIERF Phase 2 Grants will be funded through the revenue generated from Measure 1 power purchase agreements. Phase 2 Grants will assist LIDAC members with accessing regional and state energy efficiency funding. Phase 2 funding can be used for energy efficiency if additional funds become available.

Resource Hub and Gap Funding

Funding from Measure 1 will be used to operate a resource hub and secure gap funding to help LIDAC residents and business owners access funding from other sources.

WMSC Coordinator Role

The Coordinator who manages the WMSC will also work to secure funding from other available sources for additional energy efficiency upgrades. Any additional funding secured by the Coordinator will also be distributed as Phase 2 Grants to LIDACs.

Measure 2 Assumptions and Risks

Administrative Limitations

The LIERF will rely on the Coordinator for administration of the fund. GVMC will help to mitigate the risk that this employee would leave by covering for the Coordinator in the event the Coordinator is otherwise unavailable.

Solar Panel Performance

Underperforming solar production could result in less electricity being purchased from the municipal partners as well as less money being transferred to the LIERF than initially projected. The WMSC can

address this risk by deploying multiple PV arrays in multiple locations to ensure steady generation of electricity in the event one or more of the arrays are underperforming.

1.b Demonstration of Funding Need

GVMC needs CPRG implementation funding because other funding sources, such as the GHG Reduction Fund Solar for All program, are not designed to allocate funding for our novel hybrid model of pairing revenues from purchased solar electricity with a revolving fund dedicated to serving LIDACs through energy efficiency programs.

GVMC is applying for 70% of the turn-key cost to install the PV arrays because 30% of the cost will be recuperated via direct payment from the Internal Revenue Service (IRS) in accordance with the Inflation Reduction Act of 2022 (P.L. 117-169, IRA). The WMSC is eligible for the direct pay option because they will be a tax-exempt entity.

The WMSC has two options to cover the 30% gap in upfront costs to install the PV arrays. The most cost effective option is for the WMSC to use funding allocated for Measure 2 Phase 1 grants in years four and five. Once the direct pay is distributed (within a year of electrification) the money will be redirected to the LIERF for distribution in years four and five. Based on projections, the WMSC will need three installments of \$872,940 to cover the 30% funding gap for each round of PV array installation. If the PV array installation is staged over three years (years two-four) then the funding allocated for year for of Solar PV will be used to cover the 30% gap. As a last resort, the WMSC will work with the energy consultant to identify financing options.

1.c Transformative Impact

Pioneering

Our novel approach to pairing revenue generated from the purchase of solar electricity in Measure 1 with a revolving fund dedicated to executing energy efficiency programs for LIDACs in Measure 2 demonstrates a sustainable and replicable model for other municipalities with clear transformative impact. The impact achieves both greenhouse gas emissions reductions as well as provides much-needed support for LIDACs over the lifetime of the PV arrays. The impacts from Federal grants are often brief and a revolving fund based on a consistent stream of revenue from PV arrays allows for impact across much longer time horizons of twenty to thirty years.

Replicability and Scalability

This model can be scaled up to larger municipalities as well as down to smaller cities and groups to reduce greenhouse gas emissions and fit the energy needs of any given population. The ability to customize any measure is imperative for widespread adoption across communities with varying energy needs. In addition, the Coordinator will author and publicly publish a whitepaper detailing implementation of Measure 1 and Measure 2 for use by other municipalities in replicating our hybrid model.

Career Development

Both measures will have an impact on regional career development because the vast majority of funding will be passed through to either a FTE with the WMSC or to skilled labor via the installation of PV arrays or energy efficiency upgrades. Measure 2 specifically allocate \$100,000 to career development in LIDACs.

Section 2: Impact of GHG Reduction Measures

Reducing the carbon intensity of stationary energy, which Measure 1 and 2 do, can produce numerous benefits to LIDACs in West Michigan, including, renewable energy access and affordability, job creation and economic empowerment, and environmental justice and health impacts. Renewable energy access and affordability create more possibilities for community members and organizations to obtain solar and reduce their energy costs. This will offer communities that have faced disproportionate environmental benefits, reduced energy costs, and improved energy equity for low-income families. Green job creation and economic opportunities open the door for the development of new green jobs, available for people in LIDACs seeking jobs, particularly those who have been historically burdened by environmental challenges. Environmental justice and health addresses historic injustices by reducing environmental hazards, improving air quality, and revitalizing neighborhoods. This will ultimately lead to cleaner air, healthier communities, and fewer hospitalizations for conditions such as asthma and chronic obstructive pulmonary disease. These initiatives underscore a commitment to greening the grid while creating new green job opportunities and improving environmental health outcomes.

2.a Magnitude of GHG Reductions from 2025 through 2030

Measure 1 will reduce at least 8,400 metric tons of CO₂-equivalent emissions from 2025 through 2030. Measure 2 will reduce at least 9,986 metric tons of CO₂-equivalent emissions from 2025 through 2030. Together Measures 1 and 2 will reduce 18,386 metric tons of CO₂-equivalent emissions from 2025 through 2030.

2.b Magnitude of GHG Reductions from 2025 through 2050

Measure 1 will reduce at least 42,000 metric tons of CO₂-equivalent emissions from 2025 through 2050. Measure 2 will reduce at least 13,090.1 metric tons of CO₂-equivalent emissions from 2025 through 2050. Together Measures 1 and 2 will reduce 55,090.1 metric tons of CO₂-equivalent emissions from 2025 through 2050.

2.c Cost Effectiveness of GHG Reductions

The cost-effectiveness of the GHG reduction measures is \$543.86 per metric tons of CO₂-equivalent emissions from 2025 through 2030.

2.d Documentation of GHG Reduction Assumptions

Documentation of GHG reduction assumptions can be found in the Technical Appendix.

Section 3: Environmental Results – Outputs, Outcomes, and Performance Measures

3.a Expected Outputs and Outcomes

The white paper that will be written by the Coordinator will be shared throughout the MSA, and broken down into relatable messages that can be shared by GVMC and WMSC partners on social media. This will educate residents throughout West Michigan not only on GHG reduction initiatives, but lead to residents taking action to improve local air quality. Outputs and outcomes specific to each measure are discussed below.

Measure 1

The expected outputs of Measure 1 are 9 PV arrays ranging in size from 175 kW to 550 kW. The exact amount and size of arrays will not be known until Municipal Partners are identified, which will not occur until after grant award. The estimate was based on a proof-of-concept evaluation, details can be found in the Technical Appendix.

The expected outcomes from Measure 1 are an annual reduction of 1680 metric tons of CO₂-equivalent emissions (see the Technical Appendix for detailed calculations) and an average reduction in incremental utility rate for the municipal partner of 3%. The rate reduction is an estimate based on the proof-of-concept evaluation, but that percentage reduction can increase or decrease based on PPA negotiations.

Measure 2

The expected outputs of Measure 2 are \$25,000 of subawards for LIDAC sustainable career development and \$663,500 of subawards for LIDAC energy efficiency improvements annually for years 2025 through 2028. This level of funding can impact up to 97 household a year.² From 2029 through 2050 Measure 2 is expected to output \$43,000 of subawards for LIDAC energy efficiency improvements.

The expected outcomes from Measure 2 are an annual reduction of 2418 metric tons of CO₂-equivalent emissions (see the Technical Appendix for detailed calculations) from years 2025 through 2028. From years 2029 through 2050 the expected outcome of Measure 2 is an annual reduction of 157 metric tons of CO₂-equivalent emissions. Additionally, Measure 2 is expected to result in an annual savings for LIDACs of \$578,009.91 and a cumulative savings for years 2025 through 2030 of \$10,516,557.12. This figure was calculated by multiplying the average utility rate for the Midwest (.167 \$/kWh)³ by the annual reduction in kWh consumed (see the Technical Appendix).

² Calculation based on the total cost of home weatherization of \$6812, per the U.S. Department of Energy <http://energy.gov/eere/wipo/downloads/weatherization-assistance-program-national-evaluation>

³ Retrieved from the U.S. Bureau of Labor Statistics Average energy prices for the United States, regions, census divisions, and selected metropolitan areas https://www.bls.gov/regions/midwest/data/averageenergyprices_selectedareas_table.htm

3.b Performance Measures and Plan

Measure 1

The two performance measures used to assess the performance of Measure 1 will be annual PV array production (kWh) and cost savings for municipal partners (\$). The minimum expected production is 801,000 kWh by end of 2025, 1,602,000 kWh by the end of 2026, and 2,403,000 kWh by the end of 2027. The kWh goal will be reduced by .5% each year to account for the degradation of the PV arrays. The expected production numbers will be recalculated once Municipal Partners are identified. The amount of cost savings for Municipal Partners will vary based on PV array size and location, but we expect at least a 3% savings each year based on the assumed PPA price. This figure could change based on the PPA agreement. Both metrics will be tracked by the Coordinator via electricity bills provided by the Municipal Partners.

Measure 2

The two performance measures used to assess the performance of Measure 2 will be amount of subawards distributed each year (\$) and the total cost of saved electricity per year (\$/kWh). The amount of subawards distributed will be tracked by the Coordinator. The total cost of saved electricity will be calculated using the following equation:

$$\frac{\text{Capital Recovery Factor} * (\text{Total Program Administrator Costs} + \text{Participant Costs})}{\text{Gross Annual Energy Savings (kWh)}}$$

The Capital Recovery Factor = $[A * (1 + A)^B] / [(1 + A)^B - 1]$, where A = discount rate and B = estimated program lifetime in years and calculated as the savings-weighted life of measures or actions promoted by a program. The Coordinator will be responsible for tracking the kWh of electricity used in before and after each subaward award is distributed.

3.c Authorities, Implementation Timeline, and Milestones

The WMSC will be responsible for implementing both Measures. The WMSC will have the authority to carry out all aspects of both Measures. The WMSC will hire an energy consultant to assist with the implementation of the PV arrays. The energy consultant will be responsible for the following:

- Preconstruction: Final structural, geotechnical, and electrical engineering studies completed. Construction drawings created, permitting process commences, interconnection applications submitted to utility. Schedules, site logistics plans, and other coordination with installers and client.
- Procurement: Final design approval from manufacturers. Procurement of solar modules, inverters, panels, and other long lead time items
- Construction: Site mobilization, equipment staging, and roof loading. Complete electrical and mechanical installation.
- Commissioning: Final site QA/QC. Equipment testing and setup. Final documentation, utility approval, and energization. Site demobilization.

The WMSC will provide subawards via Measure two. The Coordinator will be responsible for working with subawardees throughout the entire application process (as needed or requested). The Coordinator will also be responsible for identifying contractors for implementing the work required by the subaward.

The Coordinator will be responsible for reviewing utility data before and after a subaward is issued to track progress.

Project Timeline

Key	
	WMSC Task
	Measure 1 Task
	Measure 2 Task
BOLD	Milestone

Year One Tasks												
Task	# of Months after Award											
	1	2	3	4	5	6	7	8	9	10	11	12
Establish WMSC 501(c)(3)												
Develop Coordinator job description												
Open Coordinator job application												
Hire WMSC Coordinator												
Develop Non-Profit Organization Consultant RFP												
Open Non-Profit Organization Consultant RFP												
Hire Non-Profit Organization Consultant												
Develop WMSC board procedures												
Develop WMSC handbook												
Identify Initial WMSC LIDAC Board Members												
Develop LIERF Phase 1 Grant Process												
Distribute LIERF Phase 1 Grants												
Develop Renewable Energy Advisor RFP												
Open Renewable Energy Advisor RFP												
Hire Renewable Energy Advisor												
Develop WMSC Partner RFQ												
Open WMSC Partner RFQ												
WMSC Solar Partner Selection												
Initial WMSC Board Meeting												
Install Solar												
Semi Annual Reporting												

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Section 4: Low-Income and Disadvantaged Communities

4.a Community Benefits

33% of award funding (\$3,301,066) will be allocated to Measure 2. All of the impacts of Measure 2 will be distributed to LIDACs in the form of energy efficiency funding and through the impact of the resource hub. A minimum of \$43,000 will be distributed from the LIERF to LIDACs after the grant period through 2050. The additional funding increases the amount of dedicated to LIDACs to \$4,204,066 by 2050, enough to impact 617 households⁴. \$4,204,066 is 42% of the proposed award budget.

LIERF awards will not only reduce the GHG emissions from LIDAC homes, they will lower the energy bills of LIDAC residents. Each household receiving funding can save approximately \$450 dollars a year on energy bills⁵. Over the lifetime of the grant period, LIDAC members will save \$174,600 annually due to lower energy bills.

The LIERF Resource Hub is an additional benefit that Measure 2 will provide LIDACs. The resource hub will be the one stop shop for LIDAC members to access energy efficiency funding. Once Measure 2 phase 1 funding is distributed, the Resource Hub will help LIDAC community members identify to most appropriate funding mechanism within the four county region. Phase 2 grants will be available to fund energy efficiency projects that do not qualify under other programs and Phase 2 grants will also provide gap funding should an individual need to repair a structure before it is eligible for additional funding.

4.b Community Engagement

Throughout the PCAP process GVMC completed engagement with LIDACs through the LIDAC Advisory Committee (LAC). A Stakeholder Engagement Plan was developed early in the PCAP process to lay the groundwork for seeing the community as a partner, leveraging existing networks, determining what entities will be involved in the decision-making process, and establishing communication norms with project partners. The engagement plan identified how the key stakeholders for the LAC would be selected, provided a summary of the group, and outlined responsibilities. The plan also provides context on the various strategies that will be implemented to engage with the public throughout the project. GVMC designed the engagement plan to be iterative, allowing for the reassessment and improvement of the process, as seen through the engagement updates that have taken place.

The LAC includes individuals from community-based organizations and non-profits that represent LIDACs in the MSA. These individuals were selected in collaboration with GVMC and the Michigan Sustainable Business Forum (MiSBF). Those who serve on the committee provide valuable insight from their history of environmental justice-related work in the region. The role of the committee has been to provide feedback on which tool(s) to use for the LIDAC map, submit project ideas for PCAP inclusion, provide feedback on the benefits to LIDAC areas on specific measure types, and help develop a broader engagement strategy for LIDAC areas during the CCAP.

⁴ Calculation based on the total cost of home weatherization of \$6812, per the U.S. Department of Energy <http://energy.gov/eere/wipo/downloads/weatherization-assistance-program-national-evaluation>

⁵ <https://www.michigan.gov/helpinghand/housing/weatherization/energy-weatherization#:~:text=Save%20You%20Money,of%20Food%20Assistance%20You%20Receive.>

The LAC was also engaged after the submission of the PCAP to discuss the Implementation Grant. The LAC provided two visionary recommendations:

1. All funding requested in the CPRG Implementation Grant should be passed to local residents, preferably LIDAC members, and not to for-profit companies or investor-owned utilities.
2. LIDAC members need more than another weatherization fund, specifically LIDAC members need access to funding for gap measures and a resource hub to help navigate the weatherization and energy efficiency funding landscape.

GVMC included both recommendations in this application. No funding for Measure 1 will be passed to a for-profit company or an investor owned utility. All PV array installations will be owned by WMSC, which will have representation from LIDACs on the Board. All environmental benefits from Measure 1 will stay with the participating Municipal Partner. All profits from Measure 1 will be routed into the LIERF to impact LIDACs.

The Coordinator and WMSC Board will have a responsibility and budget to continue outreach into LIDAC to develop the specific process for administering LIERF awards. The process will be developed with LIDAC input so to reduce the barriers to funding for individuals in LIDACs. We anticipate that the LAC will stay active in GVMC's planning grant until 2027, and that group could continue convening through the implementation grant award.

Section 5: Job Quality

Installation of the PV arrays associated with Measure 1 and building weatherization associated with Measure 2 will require a significant amount of labor to ensure meeting the greenhouse gas reduction targets and positive impacts for LIDAC communities. GVMC and the WMSC will ensure the following regarding securing the labor necessary for implementing Measure 1 and Measure 2:

- All workers will be paid at least the median area income;
- All employers, including contractors and subcontractors, will provide family sustaining benefits and retirement contributions;
- GVMC and the WMSC will protect employees' rights to freely and fairly join a union and collectively bargain, such as agreeing to voluntary recognition as well as majority sign-up.
- GVMC and the WMSC will require participating contractors to commit to remaining neutral in union organizing and operations;
- GVMC and the WMSC will develop benchmarks and goals to hire individuals from disadvantaged communities, in alignment with applicable law;
- GVMC and the WMSC will promote stable, predictable employment through minimizing the use of temporary or contract workers, and will provide an explanation of how workers will be properly classified

Furthermore, consideration or preference for contractors performing PV array installation as well as building weatherization will be given to contractors with BIPOC ownership. The LIERF will designate \$25,000 per year during the grant period to supplement career development programs, related to the measures proposed in this application, in the MSA that are providing opportunities to disadvantaged individuals. For example, the Grand Rapids Center for Community Transformation creates pathways for careers from training to direct hire through its Career and Entrepreneurial Development program, or Grand Rapids Community College Workforce Training Programs. Awards to supplement career development programs will be decided by the WMSC Board, as directed by its LIDAC representatives. This funding will not stand up new career development programs, but will aid and supplement key programs that already exist in the MSA.

Upon award of this funding, the Coordinator will be hired by GVMC to manage the WMSC. GVMC provides equal employment opportunities (EEO) to all employees and applicants for employment without regard to race, color, religion, sex, gender identity, national origin, age, disability, genetics or veteran status. In addition to federal law requirements, GVMC complies with applicable state and local laws governing nondiscrimination in employment.

Section 6: Programmatic Capability and Past Performance

6.a Past Performance

GVMC has successfully held and executed many federal and non-federal assistance opportunities, a few of which are listed here:

GVMC CPRG Planning Grant

- Assistance Agreement 66.046
- EPA, Grant No. 5D-00E03474
- The agreement provides funding under the Inflation Reduction Act (IRA) to GVMC to develop a regional climate mitigation plan to address greenhouse gas (GHG) emissions and reduction measures throughout the entire MSA and to conduct meaningful engagement with LIDACs and coordinate with geographically proximate tribes as appropriate. The environmental outcomes of this project include: tons of pollution (GHGs and co-pollutants) reduced annually; tons of pollution (GHGs and co-pollutants) reduced with respect to LIDACs; enhanced community engagement; improved ambient air quality; health benefits achieved, and others.
- Helen Mollsen, 77 West Jackson Boulevard, AT-18J Chicago, IL 60604-3507; 312.886.7901; Mollsen.Helen@epa.gov
- This grant project is underway and is being managed effectively in coordination with our local and federal partners. Deliverables (PCAP), quarterly reports and invoices have been submitted correctly and on time. Continuous progress is being made on the project.

Urban Waters: Grand Rapids Federal Partnership Work Plan Development and Implementation

- Award No: 22-DG-11094200-055
- USFS, 10.675 - Urban & Community Forestry
- This agreement reflects the selection of Grand Valley Metropolitan Council to support an Urban Waters Ambassador at the Grand River/Grand Rapids location.
- Jill Johnson, 1992 Folwell Ave. St. Paul, MN 55108; 651.649.5253; jill.johnson@usda.gov
- This grant is underway and is being managed effectively in coordination with our local, state, and federal partners. Reports and invoices have been submitted correctly and on time. Continuous progress is being made on the workplan.

Regional Safety Action Plan

- Award No: 693JJ32340421
- USDOT, FHWA - Assistance listing No: 20.939
- This agreement reflects the selection of Grand Valley Metropolitan Council to receive at Safe Streets and Roads for All (SS4A) Grant to develop a Regional Safety Action Plan.
- Thomas Fisher, Michigan Division Office Point of Contact, 315 West Allegan St, Room 201, Lansing, MI 48933; 517.702.1325; thomas.fisher@dot.gov
- This grant project is underway and is being managed effectively in coordination with our federal partners. Quarterly reports and invoices have been submitted correctly and on time. Continuous progress is being made on the project.

Landscape Scale Restoration: Forests to Michigan Faucets

- Award No: 22-DG-11094200-062
- USDA - Forest Service, 10.664 - Cooperative Forestry Program
- Funds were appropriated from 22-DG-11094200-062, a Landscape Scale Restoration grant from the USDA Forest Service to the Michigan Department of Natural Resources, and passed to GVMC, for projects in the state under the Cooperative Forestry Assistance Act of 1978 and approved by the Michigan Legislature.
- Ryan Toot, 1992 Folwell Ave. St. Paul, MN 55108; 651.649.5242; ryan.toot@usda.gov
- This grant project is underway and is being managed effectively in coordination with our state and federal partners. Quarterly reports and invoices have been submitted correctly and on time. Continuous progress is being made on the project.

Blue Crew: Student Stewardship of the Lower Grand River Watershed

- Award No: NA21NOS4290011
- NOAA, 11.429 Marine Sanctuary Program
- This award was made under competitive Funding Opportunity Number NOAA-NOS-ONMS-2021-2006522 posted at Grants.gov on 06/09/2020.
- Luke Evans, Great Lakes B-WET Program Specialist; 989.214.3073; luke.evans@noaa.gov
- This project was successfully completed in coordination with our local and federal partners. Final reports have been submitted and all objectives were met.

6.b Reporting Requirements

GVMC CPRG Planning Grant

- All quarterly reports have been submitted on time with adequate progress reporting.

Urban Waters: Grand Rapids Federal Partnership Work Plan Development and Implementation

- All quarterly progress reports and annual financial reports have been submitted on time with adequate progress reporting.

Regional Safety Action Plan

- All quarterly reports have been submitted on time with adequate progress reporting.

Landscape Scale Restoration: Forests to Michigan Faucets

- All quarterly and biannual reports have been submitted on time with adequate progress reporting.

Blue Crew: Student Stewardship of the Lower Grand River Watershed

- All quarterly, biannual, and final reporting requirements have been fulfilled for this funding opportunity.

6.c Staff Expertise

John Weiss is the Executive Director of GVMC, and has over 40 years of experience. GVMC is the Metropolitan Planning Organization for parts of the MSA and is responsible for \$150 million per year in transportation funding and REGIS, the Regional Geographic Information System. It is also the home of the Lower Grand River Organization of Watersheds covering over 2,900 square miles in West Michigan. GVMC is focused on intergovernmental cooperation and collaboration as well as helping to facilitate public/private cooperation and partnerships. John chaired the Michigan Infrastructure Council. He has also chaired the West Michigan Prosperity Alliance representing 13 counties in West Michigan and served on the Governor's Regional Reinvention Task Force and the 21st Century Infrastructure Asset Management Pilot. See his attached resume.

Cara Decker, GVMC Director of Environmental programs has extensive grant management experience. She has been successfully managing GVMC's CPRG Planning grant, while simultaneously managing 2 other federal grant projects, 4 other state grant projects, and numerous other contracts. She has the resources and staff to meet objectives, deadlines, and reporting requirements, and the knowledge to hire a suitable Coordinator to stand up the WMSC and the LIERF. See attached resume.

Section 7: Budget

7.a Budget Detail

A detailed description of the budget can be found in the attached Budget Narrative and Budget Spreadsheet.

7.b Expenditure of Awarded Funds

Grants funds will be expended in a timely and efficient manner. The approach, procedures, and controls for each Measure is described below.

Measure 1

The Coordinator will work with the Energy Consultant to ensure that the entire budget for Solar PV (\$6,110,580) is expended before the conclusion of the grant period. It is anticipated that the budget for Solar PV will be distributed in three phases, which each phase funding up to three projects. The first phase of budget distribution will occur in year two of the grant, which each additional phase being distributed one year after the previous. The distribution amount may vary per phase depending on the design of the PV arrays. This will not be determined until the Municipal Partners are selected during year one.

Measure 1 Program Manager Salary, Benefits, and Travel Cost

The Program Manager will dedicate 10% of their time to Measure 1, which equates to \$10,000 in compensation out of a total base salary of \$100,000 per year. The Program Manager's salary will increase 3% annually to match anticipated inflation, resulting in an annual salary of \$11,255 dedicated to Measure 1 by year five of the grant award. The Program Manager will receive pro-rated benefits of \$4,000 based on their contribution to Measure 1 annually at the beginning of the grant award which will increase along with the corresponding salary increases to finish at \$4,502 by year five of the grant award. The Program Manager will have an annual budget of \$1,573 reserved for Measure 1 travel expenses split between the Coordinator and Program Manager.

Measure 1 Coordinator Salary, Benefits, and Travel Cost

The Coordinator will dedicate 60% of their time to Measure 1, which equates to \$48,000 in compensation out of a total base salary of \$80,000 per year. The Coordinator's salary will increase 3% annually to match anticipated inflation, resulting in a salary of \$54,000 per year dedicated to Measure 1 by year five of the grant award. The Coordinator will receive pro-rated fringe benefits of \$19,200 based on their contribution to Measure 1 annually at the beginning of the grant award which will increase along with corresponding salary increases to finish at \$21,600 by year five of the grant award. The Coordinator will have an annual budget of \$1,573 reserved for Measure 1 travel expenses split between the Coordinator and Program Manager.

Measure 1 Contractual

Non-Profit Organization Consultant. A non-profit organization consultant will be hired at the beginning of the grant award for a flat fee of \$100,000 to assist with the creation of the WMSC.

Solar PV

Municipal Partner Lease Agreements. A benefit of our proposal is having municipal partners who agree to lease the PV arrays on municipal property for a nominal fee of \$1 annually. The benefit from having little to no expense for leasing the space on which the PV arrays are hosted will be increased funds that can be passed on to the LIERF in Measure 2.

Engineering / Administrative / Overhead / Permitting. We have budgeted a fixed amount of \$366,635 annually for years two, three, and four of the grant award for a total of \$1,099,904 to account for the necessary engineering, administrative, overhead, and permitting costs associated with deploying the PV arrays in Measure 1. These costs are based on the assumption that the PV arrays would be mostly deployed over years two, three, and four of the grant, and we acknowledge that this is one of the most difficult aspects of PV array development to project and budget given unforeseen variables such as conditions necessary for ground mounting and permitting obstacles.

Labor. The cost of labor used to install the PV arrays is budgeted as \$936,956 in years two, three, and four of the grant award for a total of \$2,810,867. The Energy Consultant will be tasked with procuring the necessary labor in accordance with all applicable regulations and guidance from the WMSC Board.

Equipment. PV array installations require costs related to inverters, racking equipment, and performance monitoring equipment. The aggregate costs of this equipment is estimated as \$733,270 each year for years two, three and four for a total budget of \$2,199,809 during years one through five of the grant award.

Measure 2

The Coordinator will manage the distribution of the Measure 2 subawards. The subawards grant amounts listed in the Budget Spreadsheet represent the maximum amount of subawards available to be distributed per year during the grant cycle. The Coordinator will work with the WMSC Board to develop a process for screening subaward applications and awarding subawards. Once a subaward is awarded the funding will be distributed to the contractors associated with the implementation of the subaward. The subawards will be considered grants and no repayment is expected. Subrecipients will only receive reimbursement for their actual direct or approved indirect costs and will not profit from the transaction. If there is budget remaining after a year it will be transferred into the following year. If there is projected budget remaining for the final year the Coordinator will work with the Board to identify and distribute the remaining balance before the end of the grant period.

Measure 2 Program Manager Salary, Benefits, and Travel Cost

The Program Manager will dedicate 10% of their time to Measure 2, which equates to \$10,000 in compensation out of a total base salary of \$100,000 per year. The Program Manager's salary will increase 3% annually to match anticipated inflation, resulting in an annual salary of \$11,255 dedicated to Measure 2 by year five of the grant award. The Program Manager will receive pro-rated benefits of \$4,000 based on their contribution to Measure 2 annually at the beginning of the grant award which will increase along with the corresponding salary increases to finish at \$4,502 by year five of the grant award. The Program Manager will have an annual budget of \$1,255 reserved for Measure 2 local travel expenses to split between the Coordinator and Program Manager.

Measure 2 Coordinator Salary, Benefits, and Travel Cost

The Coordinator will dedicate 40% of their time to Measure 2, which equates to \$32,000 in compensation out of a total base salary of \$80,000 per year. The Coordinator's salary will increase 3% annually to match anticipated inflation, resulting in a salary of \$36,000 per year dedicated to Measure 2 by year five of the grant award. The Coordinator will receive pro-rated benefits of \$12,800 based on their contribution to Measure 2 annually at the beginning of the grant award which will increase along with corresponding salary increases to finish at \$14,400 by year five of the grant award. The Coordinator will have an annual budget of \$1,255 reserved for Measure 2 local travel expenses to split between the Coordinator and Program Manager.

Measure 2 Contractual

Participant Support Costs. Stipends will be provided for LIDAC participation in Measure 2 at \$39,750 annually in years one through five with a total budget of \$198,750. LIDACs are the primary beneficiaries of the LIERF and associated building weatherization projects and the stipends will ensure participants in these communities are being equitably compensated for dedicating their time to ensure successful deployment of the LIERF. These funds specifically will allow the LAC to continue to function through this grant period, and allow the WMSC and the Coordinator to intentionally work with members of LIDACs to ensure LIERF monies are distributed appropriately. This committee of individuals (the LAC) from LIDACs in the MSA have been extremely valuable to GVMCs current planning process.

Subaward for Low-Income and Disadvantaged Communities' Sustainability Career. \$25,000 will be deployed annually in years two through five for a total of \$100,000 to ensure training and career development of LIDAC community members for electrification and/or weatherization projects. A well-trained workforce will ensure that these projects in the LIDACs will be performed quickly and accurately.

Subaward for Low-Income and Disadvantaged Communities' energy efficiency improvements. \$663,500 will be deployed annually in years two through five for a total of \$2,654,000 distributed to energy efficiency improvements in the LIDAC communities served by the LIERF. These energy efficiency improvements will reduce greenhouse gas emissions by reducing demand for stationary energy.

7.c Reasonableness of Costs

A description of how budget items relate to the project narrative can be found below.

Measure 1

A detailed description of each itemized budget item can be found in 7.b and in the Budget Narrative attachment. All budget items included in Measure 1 directly contribute to the emission reduction component of the Measure. The Coordinator's salary and benefits are necessary to hire a qualified individual who will be able to work with a non-profit board and an energy consultant. The travel expenses are required for the Coordinator to maintain expertise and travel to PVA array sites and/or community engagement events. The Coordinator will need a laptop to complete their job duties. All of the supplies that are itemized in Measure 1 are related to the continued community engagement. To best encourage community engagement, the WMSC must book spaces and proactively provide refreshments.

All Contractual budget items are required to achieve the project goals. A non-profit consultant will be needed to help establish the day-to-day functions of the WMSC. The Coordinator will not be hired with the intention that they are solely responsible for establishing the WMSC. Finally, the itemized costs for Solar PV are estimates based on the case study found in the Technical Appendix attachment. The costs are conservative, and it is likely that they will lead to more electricity production than estimated in this application.

Measure 2

7.b and the Budget Narrative attachment provide detailed descriptions of each budget item. All budget items included in Measure 1 directly contribute to the emission reduction component of the Measure. The Coordinator's salary and benefits are necessary to hire a qualified individual who can work with a non-profit board and an energy efficiency grant fund. Travel and Supplies costs will be required for the Coordinator to interact with the community. Community engagement is vital for the success of Measure 2.

The costs allocated for participant support will be necessary to continue to equitably engage with LIDAC members. Additional details can be found in the Budget Narrative attachment. The career development subaward, a key budget item, will directly and significantly impact the workforce necessary to decarbonize the region. The costs will be passed through to a local organization that specializes in sustainable career development (organizations will need to apply for the funding). Finally, the costs for the subaward for energy efficiency improvements is necessary to provide subawards to LIDAC members to decarbonize their businesses and homes which will lead to cost savings for LIDAC members.