

## CPRG Work Plan

### SECTION 1: OVERALL PROJECT SUMMARY AND APPROACH

#### a. Description of GHG Reduction Measures

Turtle Mountain Band of Chippewa Indians (TMBCI) is proposing four priority greenhouse gas (GHG) reduction measures, as described in further detail below:

##### **Measure 1: Recycling, Composting, & Neighborhood Waste Disposal**

First, the project team proposes to implement a measure to increase accessibility and affordability of proper municipal solid waste (MSW) disposal options that will allow for diversion of nearly 100% of MSW that is currently transported to landfill over 120 miles away, and for the first time for the Turtle Mountain community, create a source-separated recycling drop-off program. This measure is proposed to include:

- Installation of innovative MSW sorting technology at Tribal transfer station, which will enable 90-100% diversion rate.
- Construction of a new building to store recyclable materials and reusable items.
- Creation of an on-reservation composting site to handle organic materials separated from MSW at Tribal transfer station, with 2 new personnel
- Creation of four neighborhood waste & recycling drop-off locations located throughout the Turtle Mountain community. Each drop-off location will include (per site):
  - A concrete pad, with sufficient access and parking (175x150ft, 6 inch concrete)
  - 8 roll-offs/collection containers for different waste streams
  - A small office building for personnel
  - A ramp for vehicles to drive up to roll-off, increasing accessibility
  - A water spigot for cleaning
  - Surround fence for safety, security and critter control
  - Cameras for security and enforcement
  - 1 new personnel to work at each station
- Purchase of 2 electric powered garbage trucks and 2 electric rolloff pickup trucks for Tribal public works, which will be used to augment current pickups and pick up and transport the materials from the neighborhood recycling centers. Also included will be:
  - 4 electric charging stations to allow for charging of EV garbage trucks
  - Hire 4 new drivers
  - A PUP trailer to haul multiple roll offs at once

This measure was selected as a priority because the Turtle Mountain community does not yet have a robust recycling program; and Turtle Mountain Waste Management is currently sending recyclable materials to the landfill, as there is no space to store it. While Turtle Mountain Waste Management does provide household collection services, it is unable to cover all Tribal households in the community, and many of Turtle Mountain's Tribal members experience struggles with independently transporting waste to the Turtle Mountain transfer station. This can lead to improper waste disposal, such as through illegal dumping of waste outside, which poses environmental and safety hazards to the community as a whole.

This proposed measure directly relates to the following GHG reduction measures included on page 35 in the North Dakota Priority Climate Action Plan (PCAP):

- **Clean transportation:** Accelerate the transition to low- and no-carbon fuels in vehicles, equipment, and infrastructure as well as increase availability and adoption of clean travel options (rideshare, public transit expansion).
- **Waste reduction:** Reduce GHG emissions by adopting recycling and organics programs to reduce landfill GHG emissions.

The proposed measure will advance the following CPRG goals:

- **Implement ambitious measures that will achieve significant cumulative GHG reductions by 2030 and beyond:** This measure will reduce landfill waste through introduction of a recycling program. It will also reduce vehicle emissions through improved collection services, reducing the need for individual vehicles to travel to and from the transfer station and reducing Turtle Mountain Waste Management’s vehicle emissions through the use of electric garbage trucks.
- **Pursue measures that will achieve substantial community benefits, particularly in low-income and disadvantaged communities:** The proposed neighborhood waste drop-off program and recycling program will provide much-needed amenities for Turtle Mountain community members that did not exist before, while reducing environmental and safety hazards and providing beautification benefits. It will also produce opportunities for jobs and workforce development, as well as potential revenue through the sale of recyclable materials.
- **Pursue innovative policies and programs that are replicable and can be “scaled up” across multiple jurisdictions:** We anticipate the activities included under this measure to be quite replicable and able to be “scaled up” across multiple jurisdictions, as the number and size of neighborhood drop-off locations can easily be adjusted to fit the needs of jurisdictions of varying sizes, as well as the number of electric garbage vehicles.

Table 1 details tasks and milestones for implementation of Measure 1, with the period of performance estimated to be October 2024 to October 2029 (5 years). Table 2 details anticipated risks associated with measure implementation and mitigation strategies for each risk.

**Table 1. Measure 1 Tasks and Milestones**

Task #	Task Description	Anticipated Milestone Dates	Assumptions
1.1	Community engagement around program design specifics	October 2024 - November 2024	Anticipated to take 1-2 months from receipt of award
1.2	Construction of neighborhood drop-off centers	Jan 2025-Dec 2025	Agreement on locations finalized by Dec 2024
1.3	Training and new job hires in sanitation and solid waste department	June 2025-Dec 2025	Drop off center construction completed on schedule
1.4	Development of onsite tribal industrial composting capability	July 2025-June 2026	Siting on capped section of current landfill

Task #	Task Description	Anticipated Milestone Dates	Assumptions
1.5	Receipt of electric powered garbage/recycling trucks, roll-off truck, and roll-off PUP trailer	Jan 2025-Nov 2025	Equipment availability and confirmation of suitability for climate conditions
1.6	Continued community engagement and educational outreach during and following project implementation	November 2024 - October 2029 -	Based on agreed upon project duration

**Table 2. Measure 1 Risks and Mitigation Strategies**

Risk	Effect on GHG Emission Reductions	Mitigation Strategy
Delays in equipment procurement process	Delays may reduce cumulative GHG emission reductions in the near-term (2025-2030)	Research and identify equipment options prior to award to build in more time
Delays in construction	Delays may reduce cumulative GHG emission reductions in the near-term (2025-2030)	Receiving technical assistance from partners and industry experts and working closely with local, state, and federal offices to expedite site assessments and permitting
Delays in recruitment and training for newly created jobs	Delays may reduce cumulative GHG reductions due to delayed implementation	Partner with Tribal College and Tribal Workforce Development Depts with outreach, recruitment, and training

## Measure 2: Residential Solar & Energy Efficiency

Secondly, TMBCI proposes to implement a GHG reduction measure that would expand access to the benefits of residential rooftop solar with battery storage and energy efficiency retrofits for Tribal households in the Turtle Mountain community. This is expected to include low-income disadvantaged households living in single-family Housing Authority homes, medium-income households that own or lease their home, veterans, and the elderly. Specifically, we aim to deliver approximately 30% household energy savings to up to 400 qualifying households within the community. We aim to do this through a phased approach, working to provide energy efficiency retrofits and go through the interconnection process in batches spread out over the 5-year grant period. We will also work with partners to provide workforce development training in solar installation and maintenance, including certification.

This measure will be comprised of:

- Approximately 2.22 MW of combined residential rooftop solar installations with battery storage, serving up to 400 qualifying households
- Energy efficiency measures/weatherization as needed to enable participating households to obtain maximum benefit from the solar installation
- Development of a workforce training program, as well as the hiring of 4 new solar technicians, 1 Energy Planner, and 1 Assistant Energy Planner

This rooftop solar and EE retrofits measure was selected as a priority because as an area with one of the highest unemployment rates in the state (estimated at 59% by Tribal officials), Turtle Mountain Tribal members experience high rates of energy burden. According to the National Renewable Energy Laboratory's *State and Local Planning for Energy* tool, the household energy burden for Rolette County is 7.6%, considered high. As there is currently no other program in existence within the community that expands access to residential rooftop solar to the described population groups, the proposed measure would bring the benefits of renewable energy and energy efficiency to a community that has historically been one of the most underserved and at-risk in the nation.

This proposed measure relates to the following GHG reduction measure included on page 35 in the North Dakota PCAP:

- **Energy efficient housing:** Reduce greenhouse gas (GHG) emissions from residential buildings (single and multi-family) by promoting energy efficiency, renewable energy, electrification, lower-carbon design, materials, fuels, as well as retrofitting or building housing.

The proposed measure will advance the following CPRG goals:

- **Implement ambitious measures that will achieve significant cumulative GHG reductions by 2030 and beyond:** This project will deploy residential rooftop solar installations and energy efficiency retrofits to serve Tribal households, reducing the community's carbon dioxide emissions and reliance on fossil fuels in the energy sector.
- **Pursue measures that will achieve substantial community benefits, particularly in low-income and disadvantaged communities:** These benefits include reducing energy burden for low-income Tribal households by delivering approximately 20% household energy savings for up to 400 qualifying households throughout the community. Battery storage will provide resiliency benefits during grid outages, especially during the harsh winter months. The activities described in this measure will also result in high-quality jobs and workforce development opportunities in the solar and energy efficiency industry for community members.
- **Complement other funding sources to maximize these GHG reductions and community benefits:** The activities included under this measure will be complemented by related activities described in our proposal submitted for the EPA Solar for All competition: if awarded, households not included in the Solar for All proposal will be covered under this measure in order to maximize the GHG reductions and community benefits of solar energy.
- **Pursue innovative policies and programs that are replicable and can be "scaled up" across multiple jurisdictions:** We anticipate that this project will be highly replicable, with potential to be "scaled up" both within our community and in others, serving as an example of residential solar + storage deployment paired with energy efficiency retrofits in rural and Tribal communities.

Table 3 details tasks and milestones for implementation of Measure 2, with the period of performance estimated to be October 2024 to October 2029. Table 4 details anticipated risks associated with measure implementation and mitigation strategies for each risk.

**Table 3. Measure 2 Tasks and Milestones**

<b>Task #</b>	<b>Task Description</b>	<b>Milestone Dates</b>	<b>Assumptions</b>
2.1	Preliminary community engagement	Oct. 2024 - Dec. 2024	Anticipated to take 1-2 months from receipt of award
2.2	Develop ownership structure for the Tribe to own and maintain the solar installations	Oct. 2024 - Dec. 2024	Anticipated to take 1-2 months from receipt of award
2.3	Design and deployment of a process to identify program participants	Oct. 2024 - Mar. 2025	Anticipated to take 3-5 months from receipt of award
2.4	Identify contractors/partners for solar installation and energy efficiency upgrades	Oct. 2024 - Mar. 2025	Anticipated to take 3-5 months from receipt of award
2.5	Develop workforce development program	Oct. 2024 - Mar. 2025	Anticipated to take 3-5 months from receipt of award
2.6	Determine interconnection process & work with appropriate utilities on system impact study	Oct. 2024 - Mar. 2025	Interconnection process dependent on individual utility
2.7	Perform site visits & engineering assessments to refine details to be included in Phase 1 interconnection application	Mar. 2025 - June 2025	Confirmation of Phase 1 participants
2.8	Confirm Phase 1 participants	June 2025	Dependent on program participant identification process
2.0	Perform Phase 1 energy efficiency retrofits	June 2025 - Aug. 2025	Confirmation of Phase 1 participants
2.10	Submit Phase 1 solar interconnection applications to appropriate utility/utilities	June 2025 - Aug. 2025	Confirmation of Phase 1 participants, individual utility
2.11	Install and interconnection of Phase 1 systems	Oct. 2025 - May. 2026	Contractor/equipment availability, interconnection
2.12	Perform site visits and engineering assessments to refine details to be included in Phases 2-4 interconnection applications	Mar. 2026 - Mar. 2028	Confirmation of Phase 2-5 participants
2.14	Submit Phases 2-4 solar interconnection applications to North Central Electric Co-op, Otter Tail, Northern Plains, and/or Turtle Island Power	June 2026 - Aug. 2028	Confirmation of Phase 1 participants, individual utility
2.15	Install and interconnection of Phase 2-5 systems	Aug. 2026 - Mar. 2028	Contractor/equipment availability,
2.12	Continued community engagement & educational outreach	Dec. 2024 - Oct. 2029	Based on agreed upon project duration

**Table 4. Measure 2 Risks and Mitigation Strategies**

<b>Risk</b>	<b>Effect on GHG Emission Reductions</b>	<b>Mitigation Strategy</b>
Delays in equipment procurement process	Delays may reduce cumulative GHG emission reductions in the near-term (2025-2030)	Research and identify equipment options prior to award to build in more time
Delays in construction	Delays may reduce cumulative GHG emission reductions in the near-term (2025-2030)	Receiving technical assistance from partners and industry experts and working closely with local, state, and federal offices to expedite site assessments and permitting
Delays in establishing interconnection agreements with utilities	Delays may reduce cumulative GHG emission reductions in the near-term (2025-2030)	Establish early and ongoing communication with each of the utilities

### **Measure 3: Solar Lighting in Priority Community Locations**

Thirdly, TMBCI proposes to implement a measure that would install approximately 300 solar-powered street & parking lot lights throughout priority community locations. It will comprise of:

- 300 solar lights, with batteries, poles, and mast arms, plus battery replacements to extend the life of the lights to 24 years
- Hire of 1 personnel to coordinate purchase, installation, and any ongoing maintenance of the lights
- 1 electric truck, with charging station, to be used for activities relating to managing installation and any ongoing maintenance of lights

This measure was selected as a priority to improve safety and security throughout our community, replace existing lighting that is outdated or in disrepair, and provide additional lighting for some locations that only currently have partial lighting.

This proposed measure relates to the following GHG reduction measures detailed on page 35 in the North Dakota PCAP:

- **Clean energy and efficient buildings:** Reduce GHG emissions from public, commercial, and manufacturing facilities, by supporting development, re-opening, or transition of public buildings and facilities to renewable energy sources, implementation of energy efficiency measures, and/or shifting production methods products to lower-impact option

The proposed measure will advance the following CPRG goals:

- **Implement ambitious measures that will achieve significant cumulative GHG reductions by 2030 and beyond:** By deploying solar lighting, there will be reductions in GHG emissions throughout the Turtle Mountain community
- **Pursue measures that will achieve substantial community benefits, particularly in low-income and disadvantaged communities:** The proposed measure will provide energy bills savings, safety for many entities across the community, as well as the community as a whole through highway lighting/community centers

- **Pursue innovative policies and programs that are replicable and can be “scaled up” across multiple jurisdictions.** Installation of the solar lights is highly replicable and scalable, and will serve as an example of simple actions that can be taken to reduce GHG emissions throughout a community

Table 5 details tasks and milestones for implementation of Measure 3, with the period of performance estimated to be October 2024 - October 2029. Table 6 details anticipated risks associated with measure implementation and mitigation strategies for each risk.

**Table 5. Measure 3 Tasks and Milestones**

Task #	Task Description	Anticipated Milestone Dates	Assumptions
3.1	Hire of lighting coordinator personnel	Oct. 2024 - Dec. 2024	Anticipated to take 2-3 months from receipt of award
3.2	Identify contractor for light installation	Dec. 2024 - March 2025	Anticipated to take 3-5 months from receipt of award
3.3	Electric vehicle purchase & charger installation	Dec. 2024 - May 2025	Depends on supply chain availability, identification of installation contractor
3.4	Purchase & installation of Phase 1 light equipment	Dec. 2024 - Oct 2025	Depends on supply chain availability, identification of installation contractor
3.5	Purchase & installation of Phase 2 light equipment	Oct. 2025 - Oct. 2026	Depends on supply chain availability, identification of installation contractor
3.6	Purchase & installation of Phase 3 light equipment	Dec. 2026 - Oct 2027	Depends on supply chain availability, identification of installation contractor

**Table 6. Measure 3 Risks and Mitigation Strategies**

Risk	Effect on GHG Emission Reductions	Mitigation Strategy
Delays in contractor procurement process	Delays may reduce cumulative GHG emission reductions in the near-term (2025-2030)	Research and identify multiple options prior to award to build in more time
Delays in construction	Delays may reduce cumulative GHG emission reductions in the near-term (2025-2030)	Receiving technical assistance from partners and industry experts and working closely with local, state, and federal offices to expedite site assessments and permitting

#### Measure 4: Green Head Start Building/Community Center

The fourth GHG reduction measure TMBCI proposes to implement is to construct a new, energy efficient Head Start building powered by solar and geothermal energy. It would replace the existing Head Start location, which currently consists of two double-wide mobile homes. The new building is modeled after another recently-built Head Start facility on the Turtle Mountain Reservation in Belcourt, ND, and would serve the Dunseith, ND community. The building will include:

- Solar panels;
- A geothermal heating and cooling system;
- Other energy efficient features, such as triple pane windows, daylighting tubes to provide natural lighting, energy efficient insulation and roof, and LED lighting;
- Educational displays on solar and energy efficiency to serve as a learning tool for students, parents, and visitors ; and
- Multipurpose community spaces where evening, weekend, and summer programming and activities can take place, as well as educational events (such as GED classes) and cultural events (such as powwows).

This measure was selected as a priority because the Dunseith community is in dire need of a new Head Start facility; the current one does not fully meet the needs of the students and was not designed to be a permanent structure for the Head Start. This new building will invest in our Tribe's youth, serving approximately 40 area children, and become a prominent showcase of sustainability and environmental stewardship for the community, including approximately 200 low-income residents living adjacent to the building.

This proposed measure directly relates to the following GHG reduction measures detailed on page 35 in the North Dakota PCAP:

- **Clean energy and efficient buildings:** Reduce GHG emissions from public, commercial, and manufacturing facilities, by supporting development, re-opening, or transition of public buildings and facilities to renewable energy sources, implementation of energy efficiency measures, and/or shifting production methods products to lower-impact options.

The proposed measure will advance the following CPRG goals:

- **Implement ambitious measures that will achieve significant cumulative GHG reductions by 2030 and beyond:** The GHG emissions of the Dunseith Head Start will be reduced through construction of the new energy efficient building and deployment of solar and geothermal energy to offset the building's energy consumption.
- **Pursue measures that will achieve substantial community benefits, particularly in low-income and disadvantaged communities:** Construction of a new Head Start building will have significant community benefits not only for students and staff, but the community as a whole, by replacing the existing space with a new facility that can serve both as an educational space and as a multipurpose community space. The energy efficiency measures incorporated into the new building, combined with solar and geothermal energy, will also provide Dunseith Head Start with energy savings. Finally, the building will incorporate educational displays to teach students and community members about energy efficiency and renewable energy.
- **Complement other funding sources to maximize these GHG reductions and community benefits:** The design and the plans for the proposed building are based on another building in



the community and have already been purchased by the Tribe, which will produce significant savings for the project.

- **Pursue innovative policies and programs that are replicable and can be “scaled up” across multiple jurisdictions:** Given that the proposed building is itself replicating another community building, we anticipate that the project as a whole will be highly replicable and serve as a prime example for our Tribe and other communities how solar, geothermal, and energy efficiency can be incorporated into public buildings.

Table 7 details tasks and milestones for implementation of Measure 4, with the period of performance estimated to be October 2024 to October 2029. Table 8 details anticipated risks associated with measure implementation and mitigation strategies for each risk.

**Table 7. Measure 4 Tasks and Milestones**

Task #	Task Description	Anticipated Milestone Dates	Assumptions
4.1	Developing a list of energy efficiency measures and evaluating	Oct 2024 - May 2025	Anticipated to take 2-3 months from receipt of award
4.2	Contract engineering design of solar & geothermal systems	Oct 2024 - May 2025	Anticipated to take 506 months from receipt of award
4.3	Determine interconnection process & work with appropriate utility on system impact study	Oct 2024 - May 2025	Dependent on utility
4.4	Identify contractor(s) for building construction	Oct 2024 - May 2025	Anticipated to take 5-6 months from receipt of award
4.5	Identify contractors for solar and geothermal installation	Oct 2024 - May 2025	Anticipated to take 5-6 months from receipt of award
4.6	Move current double-wide buildings to an alternate location	May 2025	Contingent on contractor
4.7	Construction of building	June 2025 - June 2027	Contractor/equipment availability
4.8	Submit interconnection applications to appropriate utility	June 2026	Dependent on utility interconnection process
4.9	Install and interconnection of solar, geothermal	June 2026- June 2027	Contractor/equipment availability, contingent on interconnection agreement

**Table 8. Measure 4 Risks and Mitigation Strategies**

Risk	Effect on GHG Emission Reductions	Mitigation Strategy
Delays in equipment procurement process	Delays may reduce cumulative GHG emission reductions in the near-term (2025-2030)	Research and identify equipment options prior to award to build in more time

Risk	Effect on GHG Emission Reductions	Mitigation Strategy
Delays in construction	Delays may reduce cumulative GHG emission reductions in the near-term (2025-2030)	Receiving technical assistance from Native Sun and industry experts and working closely with local, state, and federal offices to expedite site assessments and permitting
Delays in establishing interconnection agreements with utilities	Delays may reduce cumulative GHG emission reductions in the near-term (2025-2030)	Establish early and ongoing communication with each of the utilities

### **b. Demonstration of Funding Need**

CPRG implementation funding is necessary to fully implement the proposed measures. TMBCI has explored and/or applied for related grants; however, these funds have not yet been awarded. Table 9 lists funding sources TMBCI has applied for related to the proposed measures.

***Table 9: Funding Sources Explored for Proposed Measures***

Measure	Funding Source	Funding Status	Need for CPRG Funding
Measure 2	Solar for All (US EPA)(individual)(\$66M)	Applied	While the activities included in our Solar for All proposal complement this work, they do not fully cover the needs for energy efficiency and residential solar in our community
Measure 2	Solar All (US EPA) (coalition) \$245 M	Applied	While the activities included in our Solar for All proposal complement this work, they do not fully cover the needs for energy efficiency and residential solar in our community

### **c. Transformative Impact**

This project will build equitable access to clean energy and has the potential to raise the quality of life for Turtle Mountain Tribe as a whole. The measures proposed in this application have the potential to create transformative impacts leading to further significant additional GHG emission reductions within the Turtle Mountain community and beyond, particularly with solar and energy efficiency measures for additional housing and with other new green Head Start buildings. This project will provide leadership for this community and other Tribes and underserved areas to create replicable and scalable programs to increase deployment of existing GHG emission reduction technologies and mitigation approaches.

The ability to dispose of waste at local dropoff sites will visually transform the neighborhoods and surrounding land and rebuild a sense of pride for the local environment and respect for Mother Earth. Turtle Mountain's new recycling and composting system will achieve GHG emission reductions from hard-to-abate sectors in a rural impoverished Tribal community where GHG emission reduction measures are not widely adopted. The solar lights will improve safety and reduce crime. The project's market transformations will accelerate multi-faceted deployment and market adoption of emerging GHG emission reduction technologies and practices, both for Turtle Mountain and with additional Tribal communities. This work will build pathways for Tribes to address the climate crisis and restore cultural values of respecting and protecting the Earth.

## SECTION 2: IMPACT OF GHG REDUCTION MEASURES

### a. Magnitude of GHG Reductions

Table 10 provides estimates of the cumulative emission reductions in metric tons of carbon dioxide equivalent anticipated from implementation of the proposed measures for two time periods: 2025 - 2030 and 2025 - 2050. Further details on quantification methods, relevant assumptions, annual emission reduction estimates, and any uncertainties associated with the estimates are provided in the Technical Appendix to this application.

**Table 10: Cumulative GHG Emission Reductions Anticipated from Implementation of Measures**

Measure	Cumulative GHG Emission Reductions (metric tons of CO2e)	
	2025 - 2030	2025 - 2050
Measure 1	51,610	234,593
Measure 2	6,580.93	59,228.41
Measure 3	5,468.32	35,569.17
Measure 4	627.31	4,809.35
<b>Total</b>	<b>64,286.56</b>	<b>334,199.93</b>

Implementation of the measures described in this proposal will result in sustainable and long-lasting GHG emission reductions within the Turtle Mountain community.

### b. Cost Effectiveness of GHG Reduction

The cost effectiveness of the proposal, inclusive of all measures in this application (CPRG funding requested divided by cumulative CO2e reductions for 2025-2030 for all measures included in the application) is **\$777.65** per ton of carbon dioxide emissions reduced. Costs associated with each measure are detailed in the Budget Table spreadsheet accompanying this application.

### c. Documentation of GHG Reduction Assumptions

Included in the attached Technical Appendix are explanations of the methodology and assumptions used for developing the estimated GHG emission reductions associated with each of the four measures.

## SECTION 3: ENVIRONMENTAL RESULTS - OUTPUTS, OUTCOMES, AND PERFORMANCE MEASURES

This proposal supports EPA's strategic plan Goal 1: Tackle the Climate Crisis, Objective 1.1: Reduce Emissions that cause climate change through Turtle Mountain's four priorities described above.

### a. Expected Outputs and Outcomes

Expected outputs from this proposal include:

- Equipment and technology installations, including EV waste/recycling trucks, EV chargers, solar PV, buildings retrofitted, and solar lights.

- Measures enacted and/or expanded, and related procedural milestones in implementing GHG reduction measures.
- Staff hired to implement GHG reduction measures, associated low-income and disadvantaged community provisions, associated training for workforce development.
- Semi-annual progress reports
- Detailed final report

Expected outcomes from the measures described in this proposal include:

- Reduction in cumulative metric tons of GHG emissions:
  - **2025 - 2035:** 64,286.56 metric tons of carbon dioxide emissions
  - **2025 - 2050:** 334,199.93 metric tons of carbon dioxide emissions
- Expansion of our Tribe's solid waste services, making recycling, composting, and solid waste disposal options more accessible and affordable, while providing community beautification benefits
- Increased access to the benefits of renewable energy for members of disadvantaged communities, including delivering energy savings and improving resilience
- Revitalizing a vital facility in our community to provide an improved Head Start experience for our community's youth, as well as provide community gathering spaces
- Investment in high quality jobs and educational and workforce training to build capacity and create economic opportunity within our community

## **b. Performance Measures and Plan**

TMBCI has established the following performance measurement plan to track progress toward achieving the expected outputs and outcomes for each GHG reduction measure:

- Establish top 10 Key Performance Indicators (KPIs) for overall project success;
- Establish baseline emissions that provide a benchmark for evaluating the impact of each GHG reduction measure over time;
- Track and report metrics for KPIs including tons of solid waste diverted from landfill, kWh saved and clean kWh generated, and workforce training participants.

Native Sun can assist TMBCI in measuring the progress and success in implementing each GHG reduction measure proposed for this project through streamlined data collection and spreadsheet analysis. The project team will track progress for each performance measure during monthly team meetings through review of milestone tables and provide status updates with respect to each performance measure to EPA in the semi-annual reports and final report. Following a method developed and utilized effectively with multi-Tribal initiative Electric Nation, meeting transcriptions and notes will be compiled into summaries documenting progress and used for quantitative analysis and formal reporting.

Project partners will assist with collecting qualitative and quantitative data to assess and track attitudes and opinions of project participants and community members. This may include surveying residents as well as engaging students from the Tribal college to interview members of their communities.

Project leads will use monthly and quarterly progress reports and invoicing to track each task area and compare results to budgets and the project management plan. If budget and completion deviate significantly (e.g. +/- 10%), the project management team will work together to determine steps required to address the deviation. Resource allocations will be adjusted as needed to maintain the desired schedule and budget performance. A change management plan will be created if necessary. The project team will conduct in depth annual reviews of the project performance and status as part of a continuous improvement process.

### **c. Authorities, Implementation Timeline, and Milestones**

The overarching roles and responsibilities of each party responsible for implementing the GHG reduction measures are detailed in Table 11 below. Table 12 identifies the parties, roles, and responsibilities for implementing each GHG reduction measure and their respective authority to carry out the measure or plan for obtaining authority during the grant period. An overview of the implementation timeline is described below in Table 13; a more detailed implementation timeline – including tasks, key milestones, and key actions needed to meet goals for each measure and objectives by the end of the grant period – for each measure is provided in Section 1a of this proposal. We planned for each of the four measures to take up to 5 years, with 1-2 years of oversight, community education, data and reporting and assurance of grant compliance and fidelity of federal funds.

**Table 11. Roles and Responsibilities**

Entity	Role	Responsibilities
Turtle Mountain Band of Chippewa Indians (TMBCI)	Lead Agency	<ul style="list-style-type: none"> <li>• Issuing subawards in accordance with <a href="#">EPA's Subaward Policy</a></li> <li>• Overseeing subrecipients and/or contractors and vendors</li> <li>• Tracking and reporting on project progress on expenditures and purchases</li> <li>• Tracking, measuring, and reporting accomplishments on proposed timelines and milestones</li> <li>• Submitting semi-annual progress reports on grant implementation and planned activities to EPA</li> <li>• Submitting detailed final report to EPA within 120 calendar days of the completion of the period of performance</li> </ul>
Turtle Mountain Department of Solid Waste	Partner	<ul style="list-style-type: none"> <li>• Complying with subrecipient requirements under <a href="#">EPA's Subaward Policy</a></li> </ul>
Dunseith Head Start	Partner	<ul style="list-style-type: none"> <li>• Complying with subrecipient requirements under <a href="#">EPA's Subaward Policy</a></li> </ul>
Native Sun Community Power Development	Partner	<ul style="list-style-type: none"> <li>• Complying with subrecipient requirements under <a href="#">EPA's Subaward Policy</a></li> <li>• Providing support with solar workforce training, community engagement, and measuring progress and implementation success</li> <li>• Available to assist with documenting performance</li> </ul>

Entity	Role	Responsibilities
		measures and completing reporting requirements

**Table 12: Implementing Entities Roles and Responsibilities**

Measure	Implementing Entities	Measure-Specific Roles and Responsibilities	Legal Authority
Measure 1	TMBCI, Turtle Mountain Department of Solid Waste	Lead Agency & Partner	March 2024 Tribal Council Resolution
Measure 2	TMBCI	Lead Agency	March 2024 Tribal Council Resolution
Measure 3	TMBCI	Lead Agency	March 2024 Tribal Council Resolution
Measure 4	TMBCI, Dunseith Head Start	Lead Agency & Partner	March 2024 Tribal Council Resolution

**Table 13: Project Timeline Summary**

Measure	Task	Y1	Y2	Y3	Y4	Y5
<b>1</b>	Community engagement					
	Construction of neighborhood drop-off centers					
	Sanitation & solid waste training and new job hires					
	Development of composting capability					
	Receipt of electric trucks and PUP trailer					
<b>2</b>	Community engagement					
	Preliminary program design & solar pre-development activities					
	Confirm Phase 1 participants					
	Phase 1 energy efficiency retrofits					
	Install & interconnection of Phase 1 systems					
	Phase 2 activities					
	Phase 3 activities					
	Phase 4 activities					
<b>3</b>	Hire lighting coordinator, installation contractor					
	Electric truck purchase & charger installation					
	Purchase & installation of Phase 1 lights					
	Purchase & installation of Phase 2 lights					
	Purchase & installation of Phase 3 lights					
<b>4</b>	Pre-construction & pre-development activities					
	Identify construction, solar, & geothermal contractor(s)					

Measure	Task	Y1	Y2	Y3	Y4	Y5
	Relocate current Head Start buildings					
	New building construction					
	Submit solar interconnection application					
	Install & interconnection of solar, geothermal					

## SECTION 4: LOW-INCOME AND DISADVANTAGED COMMUNITIES

### a. Community Benefits

Implementation of the measures included in this proposal are anticipated to provide significant direct and indirect benefits to low-income and disadvantaged communities (LIDACs) in addition to GHG emission reductions, as described in Table 14 below. A list of all LIDAC census tracts affected by this proposal is included as an attachment to this application. TMBCI Planning Department and its partners will assess, quantify, and report a more thorough analysis of associated community benefits based on community engagement and actual data collected during the grant period. We will also track and quantify the reduction in GHG emissions in the identified LIDAC census tracts and include results of these assessments in semi-annual reports to EPA.

**Table 14: Anticipated Benefits & Potential Negative Impacts**

Measure	Anticipated Benefits	Potential Negative Impacts / Mitigation Strategy
Measure 1	<ul style="list-style-type: none"> <li>Reduced expense and associated emissions exposure in traveling to/from landfill</li> <li>Creation of high-quality jobs &amp; new workforce training opportunities</li> <li>Improved access to &amp; affordability of waste disposal and recycling</li> <li>Revenue from recyclable materials</li> <li>Community beautification &amp; protection of natural resources through reduction in illegally dumped trash</li> </ul>	<ul style="list-style-type: none"> <li>Potential opposition to site of organics recycling facility / minimal risk since proposed site is former dump</li> <li>Potential opposition of neighborhood drop-off siting due to perceptions of attracting pests, unsightly, or odor / mitigate through education of safety measures and engagement in site selection process</li> </ul>
Measure 2	<ul style="list-style-type: none"> <li>Creation of high-quality jobs &amp; new workforce training opportunities</li> <li>Decreased energy costs and increased resilience during power outages for participating households</li> <li>Improved housing quality, comfort, and safety through energy efficiency/weatherization</li> </ul>	<ul style="list-style-type: none"> <li>Temporary disturbance to the household <ul style="list-style-type: none"> <li>Making sure there's somewhere for household members to go during construction</li> </ul> </li> <li>Extra construction materials sent to transfer station</li> </ul>
Measure 3	<ul style="list-style-type: none"> <li>Creation of new workforce training opportunities</li> <li>Improved safety &amp; security in community locations</li> </ul>	<ul style="list-style-type: none"> <li>Nuisance factor of vandalism <ul style="list-style-type: none"> <li>Cameras for security</li> </ul> </li> <li>Potential complaints about visual impact of light</li> </ul>

Measure	Anticipated Benefits	Potential Negative Impacts / Mitigation Strategy
	<ul style="list-style-type: none"> <li>Decreased energy costs and improved energy resilience</li> </ul>	<ul style="list-style-type: none"> <li>Remote control of lights/timers</li> </ul>
Measure 4	<ul style="list-style-type: none"> <li>Improved access to service and amenities through creation of a new Head Start building for the community's children</li> </ul>	<ul style="list-style-type: none"> <li>Temporary dislocation of the Head Start program <ul style="list-style-type: none"> <li>Set up temporary location</li> </ul> </li> </ul>

#### **b. Community Engagement**

The measures contained in this proposal were developed primarily by and for members of the LIDAC in which the proposed activities will take place, through extensive conversations among TMBCI and partners. Throughout the life of this grant, we will further perform early and consistent extensive community outreach and seek input from the broader Turtle Mountain Tribal community, using engagement strategies including but not limited to:

- Community meetings/listening sessions with options for in-person, livestream, and video conference participation
- Targeted outreach to known community groups and organizations, schools (such as Turtle Mountain Community College)
- Dissemination of information about how to provide input through social media, flyers, newspaper, radio, and/or attendance at community events

The project team intends to continue meaningful engagement with LIDAC members throughout and following implementation of the proposed measures, as well as engage in education efforts in advance of and during the application period. We will continually adjust our implementation strategy utilizing feedback from the community, and seek input on benefits, negative impacts, and prioritizing community values. Additionally, we will seek to include a diversity of linguistic, cultural, institutional, geographic, and other perspectives throughout this process and report on our community engagement efforts throughout the grant period.

## **SECTION 5: JOB QUALITY**

This project will incorporate high labor standards, emphasize job quality, and support equitable workforce development, with an expected 22 new high-quality Tribal jobs and new workforce training opportunities created throughout Turtle Mountain Tribal land and in surrounding low-income and disadvantaged communities. The project team will assist with advancing workforce development programs described in this application and ensure creation of high-quality jobs for:

- Neighborhood centers workforce
- Truck drivers
- Sanitation workers
- Landfill operators
- Rooftop solar, solar lighting, and EE retrofit installers and maintenance technicians
- Head Start staff



The project team will work with the Tribal College on CDL licensing, holding training for landfill workers, as well as for the local solar/wind lighting installation and maintenance workforce.

Workforce development will be a community benefit through this project's creation of equitable career pathways and training opportunities, which will include preparing individuals for high-quality, middle-skill career pathways that enable economic mobility, rather than short-term, low-wage jobs. This may involve using high-quality training models, such as Joint Labor-Management Training Programs; paid internships; and/or partnerships with community colleges that award an industry-recognized credential.

Turtle Mountain's proposed GHG workforce development will strive to include individuals with barriers to employment and may include case management and supportive services, such as childcare and transportation, for participants to address common barriers. The project team will collaborate with partners with expertise in job quality and workforce development on this portion of the work. This may include partnering with the state Department of Labor and/or state/local workforce boards. The team plans to collaborate with worker representatives, including labor unions or worker centers, to promote worker-centric, high-quality workforce development opportunities. The project team will incorporate recommendations from EPA's resources for ensuring low-income and disadvantaged communities job quality benefits. The project will strive to create high-quality jobs and workforce development opportunities in disadvantaged communities with an emphasis on expanding opportunity for workers from disadvantaged populations and under-represented small businesses/contractors.

## **SECTION 6: PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE**

### **a. Past Performance & Reporting Requirements**

The Turtle Mountain Tribe has administered, managed, and successfully carried out federal, state, and local grants and obligations for the last 48+ years. Since 2019 the Tribe has been awarded and managed EPA grants in the amount of \$5,271,000.00. The Tribal SEFA reports for 2022 reveals Tribal Management of \$112,383,775.00 in federal grants. Due to our assurance and history of meeting all requirements of each Notice of Award, all reporting, expenditures, and goals and objectives were met as required. In 2023, Turtle Mountain was awarded a \$1 million Brownfields Cleanup Grant funded by the Bipartisan Infrastructure Law, to be used to clean up the abandoned main hospital building at the former San Haven Sanitarium, building on previous EPA grants awarded and completed. Additional examples of past successful grants carried out by the Turtle Mountain Tribe will be provided upon request.

### **b. Staff Expertise**

Members of the project team have a diverse range of experience and expertise, including:

**Anita Blue** serves as Executive Director for the Tribal Planning & Economic Development Office of the Turtle Mountain Chippewa Reservation for the past 30 years. She graduated from the University of North Dakota with a double major in Business Administration and Business Management. Anita also graduated from the University of Mary with two Master degrees, one in Business Administration and the second in Business Management, while maintaining a 4.0 for both Master degrees. Anita is the Tribe's Tribal Emergency Manager for the past 30 years, writing plans to improve systems and protect the Tribe's critical infrastructure and lives. Anita is also a Professor for the University of Mary teaching both undergraduate and graduate business classes locally for the Reservation college students through accelerated business programs. She specializes in strategic management, managing economic

development and emergency management projects, statistical data manipulation and reporting, improving systems, and energy projects, and has landed millions of dollars in grant writing for new services and projects for the Turtle Mountain Chippewa Tribe. Anita has worked in Indian Country for 47 years and provides direct assistance to the Tribal Chairman and Tribal Council Representatives, and is responsible for the overall Comprehensive Economic Development Strategy for the Reservation.

**Merle StClaire** has worked within the Turtle Mountain Band of Chippewa Tribal Government as Tribal Chairman and presently as an employee of the Turtle Mountain Tribal Economic Development and Planning Department. During Merle's term as Tribal Chairman he led tribal economic development with initiatives such as developing a new SkyDancer Casino, Grand Treasurer Casino, BlueChip Online Lending Program, Tribal Dialysis Center, Eagle Heart Community Center, Byron Dorgan Youth Center, and various other developments. Merle has been appointed to numerous Board of Directors such as; Commissioner of Online Lending, Department of Agriculture Vice-President, San Haven Redevelopment member, and Gaming Commission President. Merle has spent 30+ years working to initiate numerous Economic Development Projects and has volunteered to work with developing community initiatives. He has worked as a teacher and school counselor for 12 years within the Turtle Mountain Community High School, where he has created innovative initiatives that allowed struggling students to find success. His educational background consists of completing his Bachelor of Science degree at Turtle Mountain Community College and School Counseling degree with the University of Mary.

**Farrah Gourneau** is an enrolled member of the Turtle Mountain Band of Chippewa, and has been a Tribal Planner for the past five years working in the Tribal Planning & Economic Development Office. Farrah trains new employees, writes and assists with grant writing, managing, and reporting; manages multiple projects, writes strategic planning documents, works on energy projects, and assists the Executive Directors in all aspects of the program. Farrah works closely with the Tribal Council/Government in her position. She has served as the Chairwoman of the Turtle Mountain Youth Council. In this role, she led and participated in projects and developments that affected the youth. She empowered the Youth Council and community youth to take active roles in their future and to give input and participate, get out and meet the community of all age groups, and steer the youth into their future. She worked for AmeriCorps (service to America) Vista for two years with Economic Development and community events. Farrah holds a Bachelor of Arts in Leadership and Business Management, and will be completing her Master's Degree in Native American Leadership in May 2024. Her passion is Tribal Government, Leadership, and Immersion for the Native people.

**Shanice Brien** has over 5.5 years of combined experience with customer service and over a year in Information Technology expertise. Her educational background consists of receiving her Associate of Arts, Associate of Science, and Associate of Business Administration degrees. Currently, she is pursuing her Bachelor's degree in Business Leadership and Management, set to graduate in May of 2024. Shanice possesses a diverse skill set with a particular focus on research and data collection. During her time as a data researcher and collector, she demonstrated a strong aptitude for gathering and analyzing information for Tribal planning purposes. Her half-year experience in this role has honed her abilities and data interpretation, ensuring accuracy and reliability in her findings. In addition, Shanice has gained valuable practical knowledge through her work-study, and experiences with Turtle Mountain Community College for around 2 years, where she collaborated closely with the Business Office and Finance Department. This exposure provided her with a deep understanding of financial processes and administrative functions within an academic institution. Furthermore, Shanice has actively taken growth opportunities through internships, where she assisted local business owners with various aspects of their operations. Her contributions in marketing, advertising, and web building have helped these businesses

establish a stronger online presence and reach their target audiences effectively. Shanice is an educated and driven professional poised for continued success in the field of business leadership and management and helping grow the economy of the Turtle Mountain Band of Chippewa Indians.

**Sabyl Hunt** is currently assisting in the Tribal Planning & Economic Development Office, and is responsible for the review and research of emergency plans, drafting section plans, collecting strategic plans, conducting surveys to determine types of emergencies related to disaster, and developing statistics. Sabyl went to school for Law and Justice and Business Management and Leadership in Grand Forks, ND. She served on the Turtle Mountain Youth Council for eight years, with four as Chairwoman through high school and college, advocating for youth and young adults. During that time, she also joined Ameri-Corps Vista as a Youth Communicator & Activities Specialist maintaining services and programs that satisfy specific needs for youth in the community. She is CPR/First Aid, opioid, suicide, grant, leadership, and public speaking trained. Sabyl is a fast learner, dependable, a team player, dedicated, professional, organized, knowledgeable, and has the ability to communicate with others orally and in writing, as well as multitask. Sabyl has higher goals for herself and for the surrounding communities and will continue to pursue her dreams and passions.

**Zachery S King** has been employed by the Turtle Mountain Band of Chippewa Indians as a Tribal Planner for a little over a year. He holds a total of 7 degrees combined in the business field including an Associate of Arts in Business Administration, Small-Business Entrepreneurship, and Accounting from Turtle Mountain Community College, three Bachelors of Arts in Business Management, International Business, and Marketing from Minot State University. In 2021 he received Master's degree from the University of Minnesota-Duluth. He serves as a member of the Board of Directors for Prairie Public Broadcasting, Board of Directors for Ojibwa Indian School, Native Nation Rebuilders Cohort 13, NAGPRA Turtle Mountain Committee (Native American Graves Protection and Repatriation Act), and Turtle Mountain pow wow committees. He is a past Board member for North Dakota Native Vote and has been a Anishinaabemowin language linguistics speaker for 10+ years and Turtle Mountain historian. Mr. King was one of three named plaintiffs on the case against the North Dakota Secretary of State successfully arguing the 2021 redistricting plan is unlawful. He is a Turtle Mountain Tribal Court Tribal Advocate, Native American Veterans advocate, Local Pow Wow MC, Men's Traditional Dancer, Boarding School Survivor advocate (mother attended Stephan boarding school), Organ & Tissue donor advocate for Life Source located in Minneapolis, MN, and culture and language ambassador. He serves as Cultural Liaison in advocating in reducing the number of deaths and injuries for individuals with forms of dementia, such as Alzheimer's disease, or developmental disabilities, such as autism, who, due to their condition, wander from safe environments in North Dakota. He is also a Cultural Liaison in serving as a resource for Native Americans who want additional assistance with Marketplace coverage other than relying on Indian Health Service, a Mentor/Client for the Miikanaake Fatherhood Program, Murdered and Missing Indigenous Peoples advocate, Turtle Mountain Impact healing program advocate, and underage smoking and drinking prevention committee member. He is a former Guardian Ad Litem, higher learning and education advocate, funeral and wake singer, feast plate maker, War Whooper, Paraprofessional, Storyteller, Mediator, Chinese food connoisseur, aspiring indigenous fusion chef, amateur beader, expert dreamcatcher maker, part time comedian, 1994 hip-hop music lover, single dad, film buff, tattoo lover, avid reader in Native American history, Native art enthusiast, and a shoe collector.

Resumes for key staff and personnel are also included as attachments to this application.

## SECTION 7: BUDGET

Tables 15 and 16 below are an overview of the budget for this proposal, broken down by year and measure, respectively. A detailed description of each item for each measure is included in the attached Budget Narrative, as well as a budget spreadsheet.

**Table 15. Budget by Year**

Cost Type	Category	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Direct Costs	Personnel	\$936,322	\$964,345	\$993,141	\$1,015,255	\$1,039,484	\$4,948,547
	Fringe	\$261,328	\$269,149	\$277,186	\$283,358	\$290,102	\$1,381,123
	Travel	\$24,804	\$6,560	\$16,508	\$6,760	\$6,860	\$61,492
	Equipment	\$5,551,359	\$1,162,612	\$895,300	\$0	\$0	\$7,609,271
	Supplies	\$38,300	\$22,400	\$22,400	\$17,400	\$17,400	\$117,900
	Contractual	\$12,713,550	\$9,521,164	\$5,659,180	\$3,484,180	\$3,484,803	\$34,862,876
	Other	\$5,000	\$13,900	\$9,000	\$13,500	\$9,000	\$50,400
	Total Direct	\$19,530,663	\$11,960,286	\$7,872,715	\$4,820,453	\$4,847,649	\$49,031,765
Indirect Costs	Total Indirect	\$185,782	\$187,368	\$193,518	\$193,787	\$200,359	\$960,814
<b>Total Funding</b>		<b>\$19,716,445</b>	<b>\$12,147,654</b>	<b>\$8,066,233</b>	<b>\$5,014,240</b>	<b>\$5,048,008</b>	<b>\$49,992,579</b>

**Table 16: Budget by Measure**

Measure Number	Name	Total Cost	% of Total
1	Recycling, Composting & Waste Disposal	\$16,590,556	33%
2	Residential Solar & Energy Efficiency	\$17,759,805	36%
3	Solar Lighting in Priority Community Locations	\$2,703,071	5%
4	Green Head Start Building	\$12,939,147	26%
<b>Total</b>		<b>\$49,992,579</b>	<b>100%</b>

### Expenditure of Awarded Funds

The Tribe understands the importance of financial stewardship and its legal responsibility to ensure that public monies are spent according to the scope of work and award conditions. Funds secured for this initiative will be tracked, accounted, and reported on separately and will not be commingled with any other funds. The Tribe's finance department will be responsible for financial reporting requirements including the required detailed reporting regarding expenditures. Turtle Mountain undergoes yearly

audits and has measures in place to ensure audits are timely. All purchases over \$5,000.00 (including consultants and contractors) must follow the Tribal Procurement process. Audits are performed in accordance with Government Auditing Standards.

The Office of the Tribal Comptroller will ensure strict adherence to federal policies regarding finances. The Tribal Grants Compliance department will ensure strict adherence to federal policies regarding financial and program reporting. The Tribe further ensures that supplanting will not occur. The Tribal financial department will keep clear and detailed financial records to show that grant funds will be used only for allowable costs and activities.

Each budget line item will have a specific account code and the amount appropriated to that line item will be entered into the financial program to ensure there are no cost overruns and that funds drawn down are specifically for the program costs. All reimbursement requests will be documented on a purchase order which will be submitted with all supporting documentation and will be reviewed prior to being submitted to the Comptroller's office.

The project team will work closely with our consultants, contractors, partners, EPA, and the Tribe's Comptroller, Grants Compliance Office, and financial reporting department to adequately monitor expenditures and review monthly financial records that clearly document the relevancy of project expenses and achievements.

