MTERA

Understanding the CCAP: A guide for Tribal Nations

Reviewing Key Sections and GHG Tool

April 2, 2025

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Agenda

- CCAP Project Overview
- How to Read the CCAP Report
- Summary of Key Sections of the CCAP Report
- Effectively Utilizing These Resources
- Overview of Greenhouse Gas Tool
- Demo of Greenhouse Gas Tool
- Key Points & Final Take Aways

Project Overview

The Midwest Tribal Energy Resources Association (MTERA) has been honored to lead the intertribal consortium CPRG planning grant project since 2023. Through collaboration and dedication, we submitted the Comprehensive Climate Action Plan (CCAP) to the EPA on December 17, 2024, and it was finalized in March 2025.

We are not requesting feedback on the finalized CCAP at this time. The purpose of today's webinar is to present the CCAP and the supporting GHG Tool!

Thank you to the 8 participating tribes:

- Bad River Band of Lake Superior Chippewa
- Fond du Lac Band of Lake Superior Chippewa
- Grand Portage Band of Lakie Superior Chippewa
- Ho-Chunk Nation
- Lac Courte Oreilles Band of Lake Superior Chippewa
- Leech Lake Band of Ojibwe
- Minnesota Chippewa Tribe
- Oneida Nation

What is the CCAP?

Funded by the EPA's Climate Pollution Reduction Grant (CPRG), the CCAP builds on the Priority Climate Action Plan (PCAP) and incorporates Tribal feedback and data from eight participating Tribes to provide a tailored approach to climate planning.

The Comprehensive Climate Action Plan (CCAP) is designed as both a practical toolkit and policy resource to empower Tribes to lead climate action that aligns with their unique cultural, environmental, and sovereignty priorities. It is also meant to support Tribes in leveraging funding opportunities and making data-driven decisions that protect their communities and natural resources.

Why the CCAP Matters

- **Tribal communities are on the frontlines of climate change** . Rising temperatures, changing precipitation patterns, and extreme weather events threaten critical natural resources like wild rice, fisheries, forests, and clean water—resources that hold deep cultural, spiritual, and subsistence value.
- The CCAP helps Tribes **leverage funding, technical tools, and data** to guide climate and energy planning efforts rooted in Tribal priorities, capacity, and goals.
- For many Tribal Nations, climate action is also a path to **energy sovereignty** —gaining control over energy sources, reducing reliance on outside utilities, and generating local revenue through clean energy development.
- It affirms **Tribal sovereignty in environmental decision -making** by centering Tribally driven solutions—not one-size-fits-all strategies.
- Ultimately, the CCAP is more than a climate plan—it's a roadmap for **community empowerment, intergenerational stewardship, and a just transition to a healthier, more self -sufficient future** for Tribal Nations across the Midwest.

Summary of CCAP Sections

Key Sections of the CCAP

Section 2: GHG Inventory

Section 3: GHG Emissions Projections and Targets

Section 4: GHG Reduction Measures and Benefits

Section 5: Co-Pollutant Emissions & LIDAC Census Data

Section 6: Authority to Implement

Section 7: Intersection with Other Funding Availability

Section 8: Workforce Planning Analysis

How to Read the CCAP

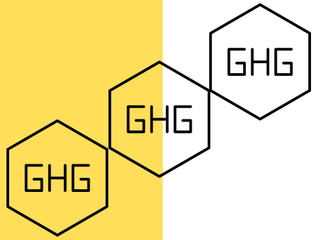
The CCAP is not meant to be read front to back in one sitting. Instead, it functions as a *living reference tool*—something you return to when exploring new projects, preparing grant proposals, or making community decisions.

To use the CCAP effectively:

- Start with **Section 1.2**, which offers a roadmap to the rest of the document. It outlines the purpose of each section and how they support climate action planning.
- Use the **PDF Bookmarks and Hyperlinks** to quickly navigate to sections that are most relevant to your Tribe—whether that's data on GHG emissions, funding sources, or specific reduction strategies.
- Reference **Appendices A–F** for in-depth technical methods and supporting analyses.

Section 2:
GHG Inventory

- Presents detailed data on greenhouse gas (GHG) emissions from key sectors:
  - Buildings
  - Transportation
  - Waste
  - Agriculture & Land Use
- Uses both direct (Scope 1) and indirect (Scope 2) emissions to help Tribes understand where emissions are coming from. Crucial for identifying high-impact areas for reduction and informing Tribal energy and sustainability planning.
- Includes Tribe-specific data for the eight participating Tribes (see Appendix A), offering tailored insights for targeted planning.



Why it Matters to Tribal Nations:

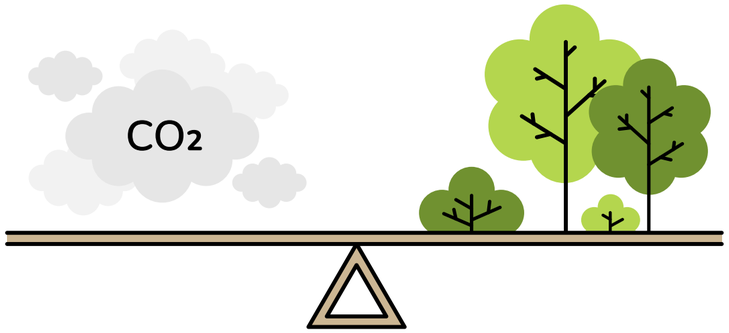
This section is particularly important to Tribal Nations because it establishes a foundational understanding of the sources of emissions.

It gives Tribes the ability to make informed decisions based on data that is relevant to their unique infrastructure, geography, and population. A strong emissions baseline enables Tribes to monitor progress over time, strengthen grant proposals with quantified need, and direct resources toward sectors with the greatest impact.

Most importantly, by developing and owning their GHG inventories, Tribes assert sovereignty over their energy and environmental data—an essential step toward energy independence, resilience, and culturally informed climate action.

Section 3:
GHG Emissions Projections & Targets

- Projects future emissions under a Business-as-Usual (BAU) scenario and compares it to scenarios with Tribal action.
- Sets aggressive but achievable targets: 45% reduction by 2030 and net-zero by 2050.
- Visuals illustrate the scale of effort needed and the potential impact of various measures.



Why it Matters to Tribal Nations:

This section is crucial to Tribal Nations because it helps set long-term goals grounded in Tribal priorities and capacity. ***By modeling what the future could look like with and without intervention, it becomes easier for Tribal leaders to advocate for action and resources.***

These projections also align with state and federal planning efforts, which can be critical when pursuing implementation funding or collaborating with outside agencies. **Establishing emissions targets based on Indigenous-informed data and planning reinforces Tribal self - determination and gives communities a strategic pathway to climate resilience.**

Section 4: GHG Reduction Measures & Benefits

- Outlines 28 concrete actions across five categories:
  - Renewable energy
  - Building efficiency
  - Transportation
  - Land management
  - Wastewater
- Each measure includes cost, emissions reduction potential, and co-benefits such as improved health or job creation.
- Uses EPA tools like AVERT & COBRA to quantify public health benefits.

Why it Matters to Tribal Nations:

For Tribal Nations, this section serves as a toolkit of real, actionable strategies. ***Each measure supports multiple Tribal goals at once***—reducing pollution while also lowering energy bills, improving public health, enhancing environmental stewardship, and creating local jobs.

It's especially valuable because it allows Tribes to design customized climate plans that reflect their cultural values, economic realities, and geographic conditions. The breadth of strategies included means that whether a Tribe is just beginning its climate work or expanding established initiatives, there are measures in this section that can be implemented effectively and meaningfully.

Section 5: Co-Pollutant Emissions & Environmental Justice

- Assesses how climate actions also reduce hazardous air pollutants (HAPs) and criteria air pollutants (CAPs).
- Uses EPA National Emissions Inventory (NEI) and mapping tools to highlight overburdened Tribal communities.

Why it Matters to Tribal Nations:

This section is vital to Tribal Nations because many Indigenous communities are already experiencing overlapping environmental and health burdens, often due to a history of systemic marginalization.

By documenting how climate strategies also clean the air and improve public health, Tribes can make a stronger case for funding and support. It allows them to prioritize equity in climate action and to uplift community wellness as an integral part of sustainability. Furthermore, it offers data to help Tribes hold external actors accountable and advocate for protections in areas with historically high pollution exposure.

Section 6: Authority to Implement

- Reviews Tribal sovereignty and legal authority to implement GHG reduction measures.
- Describes how state and federal policies interact with Tribal jurisdiction.
- Includes implementation considerations across sectors, helping Tribes understand regulatory landscapes.

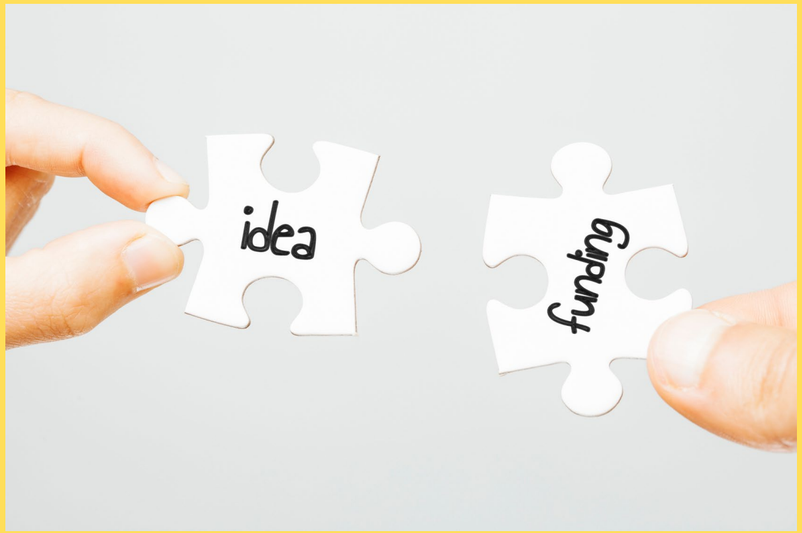
Why it Matters to Tribal Nations:

This section is particularly significant for Tribal Nations because it reinforces the fact that Tribes are not merely stakeholders, but sovereign governments with the inherent right to govern their lands and communities.

It empowers Tribal leadership to move forward with implementation on their own terms, while also equipping them with the knowledge to negotiate or collaborate with other jurisdictions when necessary. By understanding their authority clearly, Tribes can avoid unnecessary delays, assert self-determination in climate policy, and protect the integrity of their lands and cultural priorities.

Section 7: Funding Opportunities

- Lists relevant funding sources, incentives, and grants to support climate project implementation.
- Encourages Tribes to layer funding sources from federal, state, and private programs.
- Highlights successful examples of CPRG-aligned funding already secured by Tribes.



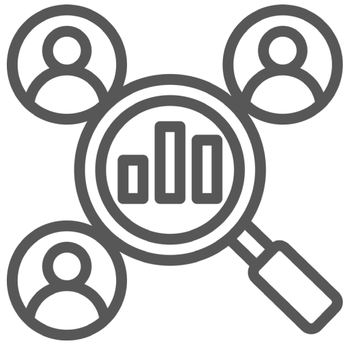
Why it Matters to Tribal Nations:

This section is of immense value to Tribal Nations because even the most well-designed climate plan cannot be implemented without resources. ***Understanding the landscape of funding options ensures that Tribes can move from planning to action.***

By showcasing funding successes already achieved by peer Tribes, this section fosters collaboration and knowledge-sharing. It also positions Tribes to take advantage of historic levels of climate funding currently available through federal infrastructure and clean energy legislation. Most importantly, it supports Tribal control over project design and implementation by aligning funding with community priorities.

Section 8:
Workforce Planning Analysis

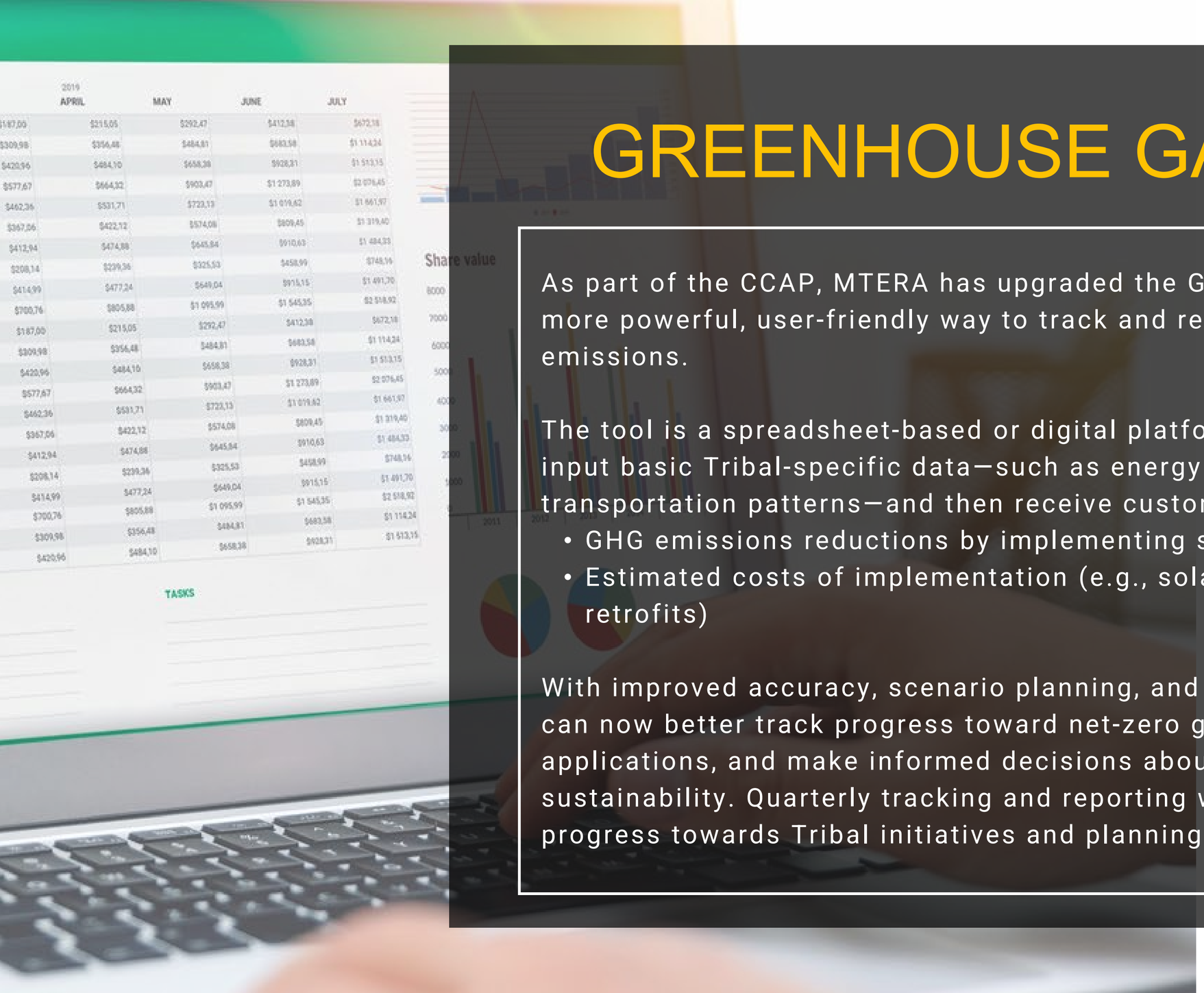
- Examines current and future job needs related to implementing CCAP measures.
- Addresses workforce challenges like training gaps and labor shortages.
- Provides solutions for creating equitable and culturally relevant employment pathways in clean energy and climate sectors.



Why it Matters to Tribal Nations:

This section matters deeply to Tribal Nations because climate action is not just an environmental issue—it's also an economic one. Clean energy, energy efficiency, and climate resilience can create good-paying, long-term jobs, especially for youth and returning citizens.

Ensuring that Tribes have a trained, local workforce builds resilience from within and reduces dependence on external contractors. It also ensures that the economic benefits of climate investment stay in the community. Workforce development rooted in sovereignty, culture, and self-reliance strengthens the fabric of Tribal economies and prepares communities for the clean energy transition.



GREENHOUSE GAS TOOL

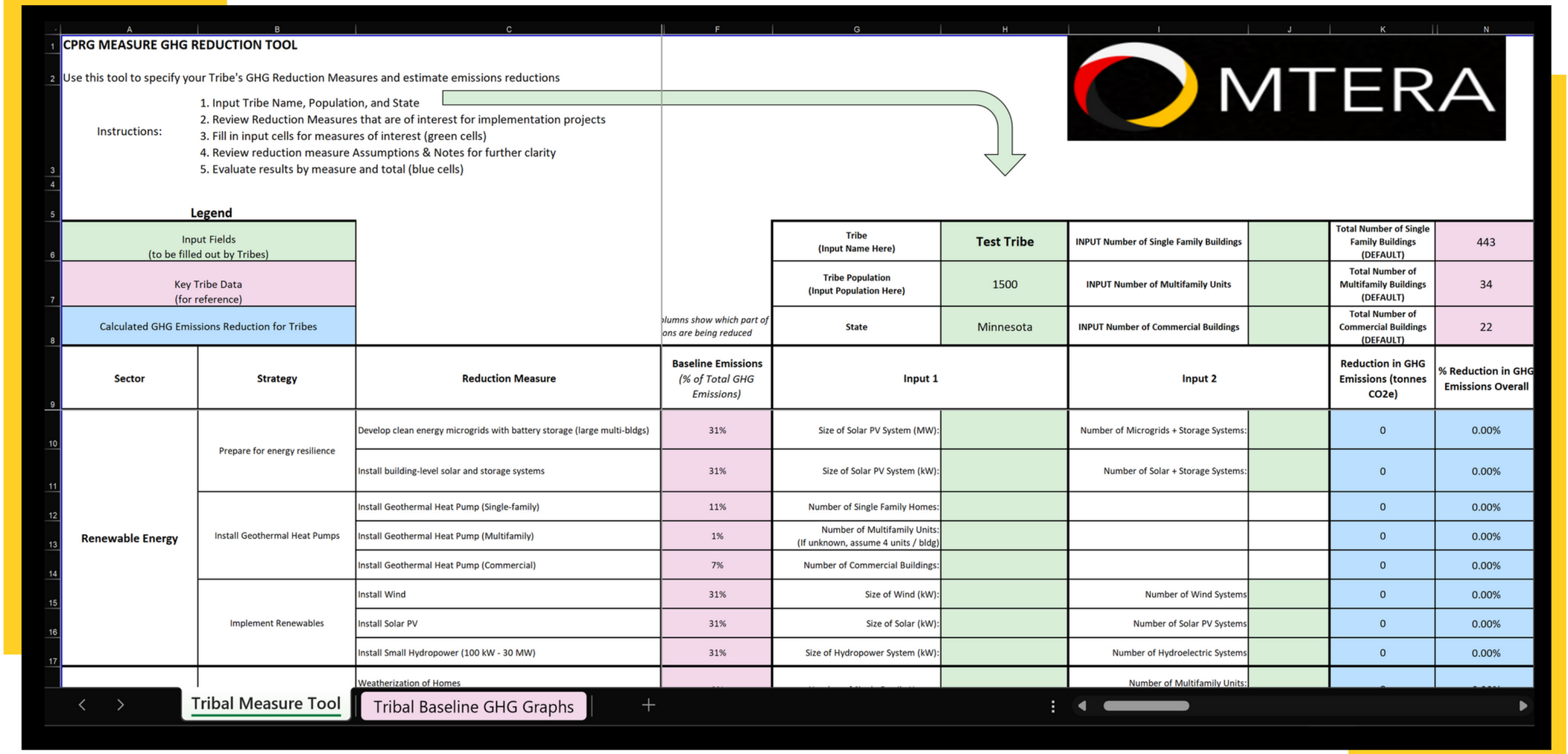
As part of the CCAP, MTERA has upgraded the GHG Tool to give Tribes a more powerful, user-friendly way to track and reduce greenhouse gas emissions.

The tool is a spreadsheet-based or digital platform that allows users to input basic Tribal-specific data—such as energy usage, building stock, or transportation patterns—and then receive customized outputs estimating:

- GHG emissions reductions by implementing specific CCAP measures
- Estimated costs of implementation (e.g., solar installation, LED retrofits)

With improved accuracy, scenario planning, and easier reporting, Tribes can now better track progress toward net-zero goals, strengthen funding applications, and make informed decisions about clean energy and sustainability. Quarterly tracking and reporting will help ensure steady progress towards Tribal initiatives and planning.

GHG DEMO



CPRG MEASURE GHG REDUCTION TOOL

Use this tool to specify your Tribe's GHG Reduction Measures and estimate emissions reductions

Instructions:

1. Input Tribe Name, Population, and State
2. Review Reduction Measures that are of interest for implementation projects
3. Fill in input cells for measures of interest (green cells)
4. Review reduction measure Assumptions & Notes for further clarity
5. Evaluate results by measure and total (blue cells)

MTERA

Legend

Input Fields (to be filled out by Tribes)
Key Tribe Data (for reference)
Calculated GHG Emissions Reduction for Tribes

				Tribe (Input Name Here)	Test Tribe	INPUT Number of Single Family Buildings		Total Number of Single Family Buildings (DEFAULT)	443
				Tribe Population (Input Population Here)	1500	INPUT Number of Multifamily Units		Total Number of Multifamily Buildings (DEFAULT)	34
			olumns show which part of ons are being reduced	State	Minnesota	INPUT Number of Commercial Buildings		Total Number of Commercial Buildings (DEFAULT)	22
Sector	**Strategy**	**Reduction Measure**	**Baseline Emissions** *(% of Total GHG Emissions)*	**Input 1**		**Input 2**		**Reduction in GHG Emissions (tonnes CO2e)**	**% Reduction in GHG Emissions Overall**
Renewable Energy	Prepare for energy resilience	Develop clean energy microgrids with battery storage (large multi-bldgs)	31%	Size of Solar PV System (MW):		Number of Microgrids + Storage Systems:		0	0.00%
		Install building-level solar and storage systems	31%	Size of Solar PV System (kW):		Number of Solar + Storage Systems:		0	0.00%
	Install Geothermal Heat Pumps	Install Geothermal Heat Pump (Single-family)	11%	Number of Single Family Homes:				0	0.00%
		Install Geothermal Heat Pump (Multifamily)	1%	Number of Multifamily Units: (If unknown, assume 4 units / bldg)				0	0.00%
		Install Geothermal Heat Pump (Commercial)	7%	Number of Commercial Buildings:				0	0.00%
	Implement Renewables	Install Wind	31%	Size of Wind (kW):		Number of Wind Systems		0	0.00%
		Install Solar PV	31%	Size of Solar (kW):		Number of Solar PV Systems		0	0.00%
		Install Small Hydropower (100 kW - 30 MW)	31%	Size of Hydropower System (kW):		Number of Hydroelectric Systems		0	0.00%
		Weatherization of Homes				Number of Multifamily Units:			

Tribal Measure Tool | Tribal Baseline GHG Graphs

GHG DEMO: Key Input Fields

Legend
Input Fields (to be filled out by Tribes)
Key Tribe Data (for reference)
Calculated GHG Emissions Reduction for Tribes

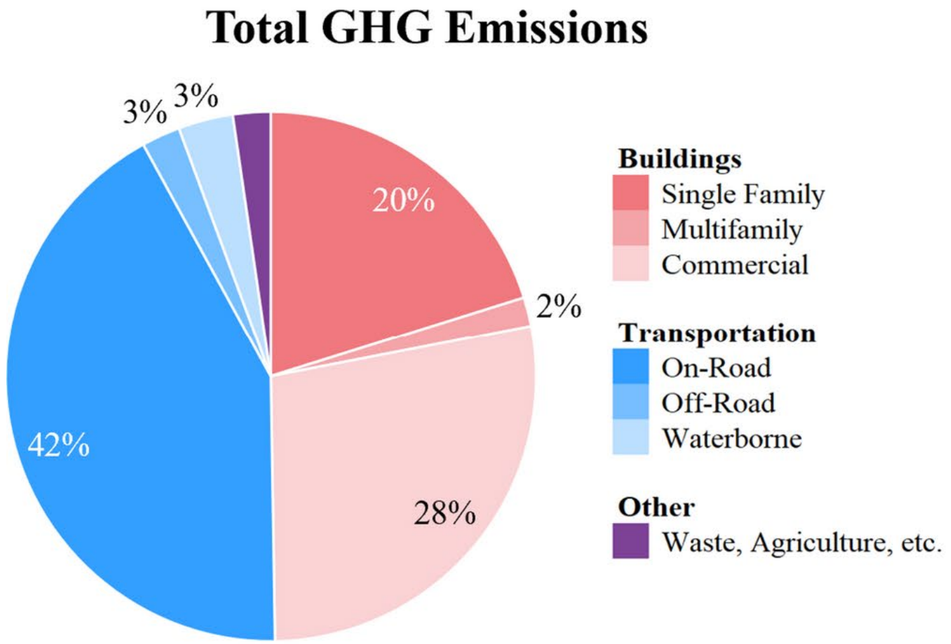
Instructions:

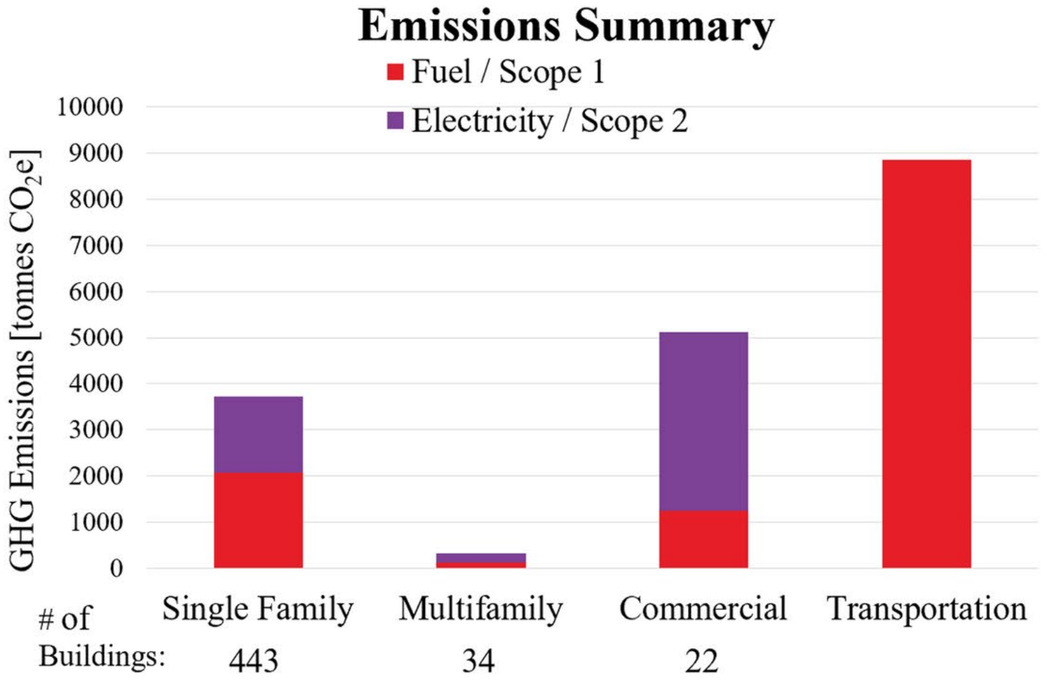
1. Input Tribe name, population, and state
2. Review reduction measures that are of interest (columns A-C)
3. Fill in input cells for measures of interest (green cells)
4. Review reduction measure assumptions & Notes for further clarity (columns Q-T)
5. Evaluate Results by measure and total (blue cells)

Tribe (Input Name Here)	**Test Tribe**	**INPUT Number of Single Family Buildings**		**Total Number of Single Family Buildings (DEFAULT)**	443
Tribe Population (Input Population Here)	1500	**INPUT Number of Multifamily Units**		**Total Number of Multifamily Buildings (DEFAULT)**	34
State	Minnesota	**INPUT Number of Commercial Buildings**		**Total Number of Commercial Buildings (DEFAULT)**	22

GHG DEMO:
Tribal Baseline GHG Graphs

- High-level estimates of baseline GHG emissions by sector
- Projected from data averages from 8 participating Tribes in MTERA CPRG
- Influenced by Tribal population and # of buildings input





GHG DEMO:
Measure Baseline Emissions

These columns help with prioritizing measures with greatest potential GHG savings

- What type of GHGs are being reduced (Fuel vs. Electricity)
- How significant can this measure be in reducing total GHG emissions for my Tribe?
- The higher %, the more significant this measure can be in reducing emissions

	For each measure, these columns show which part of the Tribe's total emissions are being reduced	
Reduction Measure	**Measure GHG Baseline** *Scope 1 = Fuel Scope 2 = Electricity*	**Baseline Emissions** *(% of Total GHG Emissions)*
Install building-level solar and storage systems	Total Electricity (Scope 2)	31%
Install Geothermal Heat Pump (Single-family)	Single-Family Fuel (Scope 1)	11%

GHG DEMO: Results

$/ton of GHG Emissions Reduced – Provides a streamlined point of comparison across measures

- Lower $/ton = more cost -effective project

Reduction in GHG Emissions (tonnes CO2e)	% Reduction in GHG Emissions Overall	Cost Estimate	$/ton of GHG Emissions Reduced
1211	6.55%	$ 5,888,000	$ 4,863

Results are totaled across measures in top right of tool.

Total Reduction is Equivalent to offsetting emissions from...		
270	153	7
Gasoline-Powered Passenger Vehicles for One Year	Homes' Energy Use for One Year	Railcars of coal burned

Test Tribe		
Total Reduction in GHG Emissions (tonnes CO2e)	Total % Reduction in GHG Emissions	Total Cost Estimate
1211	**7%**	**$5,888,000**

GHG DEMO: Assumptions & Notes

- These columns help provide additional information regarding the GHG savings and cost estimates
- See Appendix B- Reduction Measure Methodology for additional information, including calculation equations and data sources.

Measure Assumptions & Notes	Cost Assumptions & Notes
1MW of solar needs approximately 10 acres of land	NREL Quarterly Cost Benchmark Report (2023) $2,682/kW for residential: below 500kW, $1,761/kW for community: 500kW to 20MW, and $1,161/kW for utility-scale: 20MW and above

CCAP REVIEW & GREENHOUSE GAS TOOL

KEY POINT

We discussed the recent updates to the CCAP tool and how it will support your community's energy planning, helping you navigate changes and maximize the tool's benefits.

KEY POINT

We touched on the importance of Tribal engagement in clean energy efforts, emphasizing how the tool can help align your plans with tribal sovereignty and emergency preparedness.

KEY POINT

We shared resources available through MTERA, including additional training sessions, energy data management tools like Portfolio Manager and E-gage, and guides on financial reporting and subawards.

KEY POINT

We encourage all participants to leverage these resources for data visualization, energy efficiency initiatives, and renewable energy projects.

CCAP Review & Greenhouse Gas Tool

Resources

📊 GHG Reduction Measure Tool– Technical Assistance

- Tool includes built-in guidance tabs and default data to get Tribes started even without complete inventories.
- Reach out directly via MTERA's contact email to request assistance.

🌐 MTERA Website (Main Hub for Materials)

- The CCAP, Priority Climate Action Plan (PCAP), and GHG Reduction Measure Tool will all be hosted on the MTERA website.

VISIT MTERA.ORG TO LEARN MORE,
OR
REACH OUT TO ME AT
DAVIDWAYBENAG@MTERA.ORG

MIIGWECH! (THANK YOU!)

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