



Conservation Improvement Program with Native American Tribal Governments and Members

A Review of Barriers and Opportunities for
Indigenous Peoples in Minnesota

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The State of Minnesota Is Located on Anishinaabe Land and Dakota Land

We acknowledge the work we do in Mni Sota Makoce, the State of Minnesota, involves land that is of great historical, spiritual, and cultural significance to the Anishinaabe people and Dakota people. We also acknowledge the past and present harm done to Anishinaabe, Dakota, and other Indigenous nations through systematic racism, the forced removal of their people from their lands, and the seizure and colonization of these lands. We reflect on our place in these histories and our obligation to rectify the erasure of Indigenous peoples in our work. We acknowledge the Indigenous peoples on whose land we live, learn, and work as we seek to improve and strengthen our relations with Indigenous and sovereign nations.

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The authors would also like to recognize and acknowledge the deep insight, feedback and time spent by participating Indigenous representatives. Your input was invaluable.

DISCLAIMER

The project team understands that each of the 11 Indigenous nations in Minnesota have varying views and opinions. We sought to reflect and aggregate common viewpoints to develop our recommendations. Similarly, this report does not necessarily represent the view(s), opinion(s), or position(s) of the Minnesota Department of Commerce (Commerce), its employees or the State of Minnesota (State). When applicable, the State will evaluate the results of this research for inclusion in Conservation Improvement Program (CIP) portfolios and communicate its recommendations in separate document(s).

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Definition of Terms and Acronyms

- CIP: Conservation Improvement Program
- ITLF: Indian Land Tenure Foundation
- MNIAC: Minnesota Indian Affairs Council
- MTERA: Midwest Tribal Energy Resource Association

Executive Summary

There are 11 Native American nations that share the same geography as the State of Minnesota and comprise approximately 5% of total Minnesota land area (Figure 1). These Indigenous nations are sovereign and strive to provide a quality life for their people for generations into the future. Goals around energy conservation, renewable energy production, and greenhouse gas emissions reduction are important to many Tribal governments and members. Each Native nation is unique in terms of how it plans and pursues energy investment projects. Some have dedicated staff positions to develop and implement energy planning. Many, however, have limited internal staff capacity to explore opportunities, define a strategy, plan projects, pursue funding, and ensure successful construction and commissioning. For these Native nations, energy efficiency projects simply do not happen despite intense interest in investments that enhance sovereignty, increase sustainability, improve reliability, and lower electric and natural gas costs.

The Minnesota Department of Commerce, Division of Energy Resources funded this project to increase understanding of the opportunities and barriers for Native nations in Minnesota to invest in energy efficiency through the Minnesota Conservation Improvement Program (CIP). The research drew on the wealth and depth of knowledge from Tribal governments and members to provide perspective, meaningful guidance, direction, and accountability. Through a transparent approach, this project targeted three main goals:

1. Identify the specific energy-efficiency needs of Tribal governments and members, the barriers to implementation of needed energy-efficiency improvements, and the existing resources of Tribal governments and members that can be leveraged to overcome barriers and increase implementation of energy-efficiency improvements.
2. Estimate energy and carbon saving potential resulting from increased implementation of natural gas and electric utility CIPs within Tribal governments and members.
3. Provide specific, actionable recommendations for developing successful CIP programming that serve the needs of Tribal governments and members.

The project team was led by the [Indian Land Tenure Foundation](https://iltf.org/) (ILTF)/[National Indian Carbon Coalition](https://www.indiancarbon.org/) (NICC) (<https://iltf.org/>/<https://www.indiancarbon.org/>) and included representatives from the [Midwest Tribal Energy Resource Association](https://www.mtera.org/) (MTERA) (<https://www.mtera.org/>), [Slipstream](https://slipstreaminc.org/) (<https://slipstreaminc.org/>), and [LHB](https://www.lhbcorp.com/) (<https://www.lhbcorp.com/>).

This study provides new insights and important stakeholder feedback from both Indigenous and energy utility representatives. In addition to identifying CIP participation uplift barriers, several important questions are raised. After our information review, we sought to distill recommendations to meet the original goals of this project and consider how overarching systems might be modified to simultaneously meet state climate, energy, and equity goals as well as increase the benefits to be gained for Native nations. The study's recommendations are driven by the identified needs for programs and resources that more holistically address Indigenous climate and energy goals, improve communications between all stakeholders, and provide a more coordinated approach for Native nations to invest in their communities. While the project team also calculated the energy efficiency potential of investments made on Indigenous lands, our recommendations focus on the insights provided through stakeholder feedback rather than the estimates derived of overall Indigenous energy efficiency potential.

Our specific recommendations are as follows, with more details provided in the main report:

Provide dedicated resources for Native nations to develop and implement energy and climate plans that incorporate CIP across a portfolio of projects benefiting people and businesses on reservation.

Native nations in Minnesota have a range of goals that pertain to energy and climate changes in the future; each nation approaches these goals in different ways. The goals may be formalized through Tribal resolutions or with the creation of a staff position focused on energy, resiliency, and/or climate action. These nations are not only limited by funding to invest in achieving formal and informal goals but also the staff time to dedicate to these initiatives.

We recommend that the state of Minnesota invest in new pathways to support Indigenous peoples in meeting their internal goals that will also benefit statewide climate goals. This could include dedicating a Commerce staff person to act as a liaison between each Native nation in Minnesota and their energy utility service providers to ensure that CIP resources are considered and pursued in a holistic approach to energy efficiency upgrades across buildings on their lands. This strategy should include financial support for each Native nation to employ staff who are dedicated to developing and implementing energy and climate plans that incorporate CIP resources. Working together, a Commerce staff person and Indigenous staff could also better leverage existing resources such as those provided through partnership and cohort-based organizations such as MTERA.

Develop guidance for energy service providers on strategies for connecting with Indigenous leaders, staff, and members.

Through our conversations with utility representatives, we found that there was a variable level of understanding on effective ways to connect with Indigenous customers and members. Although some utilities have a Tribal liaison or representative, many expressed that they do not see the need to provide targeted communications to Tribal governments or people living on Reservation. Even when relationships are established, some utilities see challenge in maintaining continued communications with the Native nations due to staff turnover on both sides.

We recommend the development of guidance for utilities to maximize their communications with Indigenous peoples. These communications could provide clarification on the role of energy efficiency and conservation investments in meeting Indigenous energy goals. Energy service providers could be encouraged to partner with Indigenous representatives and organizations to build trust around the messaging.

Improving utility-Native relations will require more than targeted messaging. Investment is needed to build individual relationships between energy service provider representatives and Indigenous leaders, staff, and members. We recommend that each utility serving Indigenous customers allocate resources for a liaison to Native nations. Ultimately, this increased emphasis on augmenting communications with each nation will foster deep relationships between Indigenous peoples and their utilities, enabling more effective partnerships in achieving energy conservation goals.

Support the Tribal Energy Council comprised of representatives from each of the 11 Native Nations of Minnesota.

Indigenous representatives indicated that the understanding of existing CIP and Commerce resources was varied. Depending on the Tribe's relationship with their utility, some may take advantage of CIP funding more or less than others in the state. This recommendation targets the information gap between Native nations and leverages the partnership amongst them to close that gap by supporting the implementation of the Tribal Energy Council.

This Tribal Energy Council concept has already been developed through a resolution voted on by the Minnesota Indian Affairs Council (MIAC). The intent of the Tribal Energy Council is to share resources and ideas on ways to improve energy and climate resiliency for Native nations. This Council could be a place for Commerce to provide direction on ways that Tribal governments can leverage existing funding, including CIP funding. Nations will share experiences and best practices to help all members navigate existing utility programs, services, and systems.

Develop a funding mechanism that supports an autonomous and coordinated approach for Native nations to invest in energy conservation projects.

Our study found that current state and utility programs for financing energy efficiency projects are not easily accessed by Indigenous peoples. These programs then leaving energy savings opportunities on the table. With scarce resources especially for staff time, Native nations need a streamlined approach to accessing funding and implementing projects at scale across their lands. Organizations like MTERA are working to address the inefficiencies in how funds and resources are distributed to Native nations. MTERA's primary goal is to empower Indigenous staff to manage energy projects and resources on their lands. A major aspect of that goal is ensuring Indigenous staff are aware of and pursue funding opportunities like the CIP. To best leverage MTERA's support, these nations also need more autonomy in making decisions about effective implementation of energy efficiency funding.

We recommend developing a pilot program for two to three Native nations in Minnesota to outline a process and then demonstrate how they can administer and direct their own energy efficiency investments. Along with the above recommendations of a dedicated Tribal staff person and Tribal Energy Council, this pilot's participating Native nations will have the foundation to prioritize and implement energy investments in a way that most closely aligns with their internal goals. This new approach will address the disconnect that Indigenous peoples feel between their energy, climate, and resiliency goals and how they work with utilities through CIP to achieve those goals. This pilot will address direct energy investments as well as workforce development strategies to foster the younger Indigenous generation to conduct and implement the energy efficiency investments. The nations in this pilot will work in partnership with the state to ensure that funding is strategically used and tracked according to both Minnesota and Indigenous goals.

Introduction

Project Objectives

The Minnesota Department of Commerce, Division of Energy Resources funded this project to increase understanding of the opportunities and barriers for Minnesota Tribes to invest in energy efficiency through the Minnesota Conservation Improvement Program (CIP).¹ This research draws on the wealth and depth of knowledge from Tribal governments and members to provide perspective, meaningful guidance, direction, and accountability. Through a transparent approach, this project targeted three main goals:

1. Identify the specific energy-efficiency needs of Tribal governments and members, the barriers to implementation of needed energy-efficiency improvements, and the existing resources of Tribal governments and members that can be leveraged to overcome barriers and increase implementation of energy-efficiency improvements.
2. Estimate energy and carbon saving potential resulting from increased implementation of natural gas and electric utility CIPs within Tribal governments and members.
3. Provide specific, actionable recommendations for developing successful CIP programming that serve the needs of Tribal governments and members.

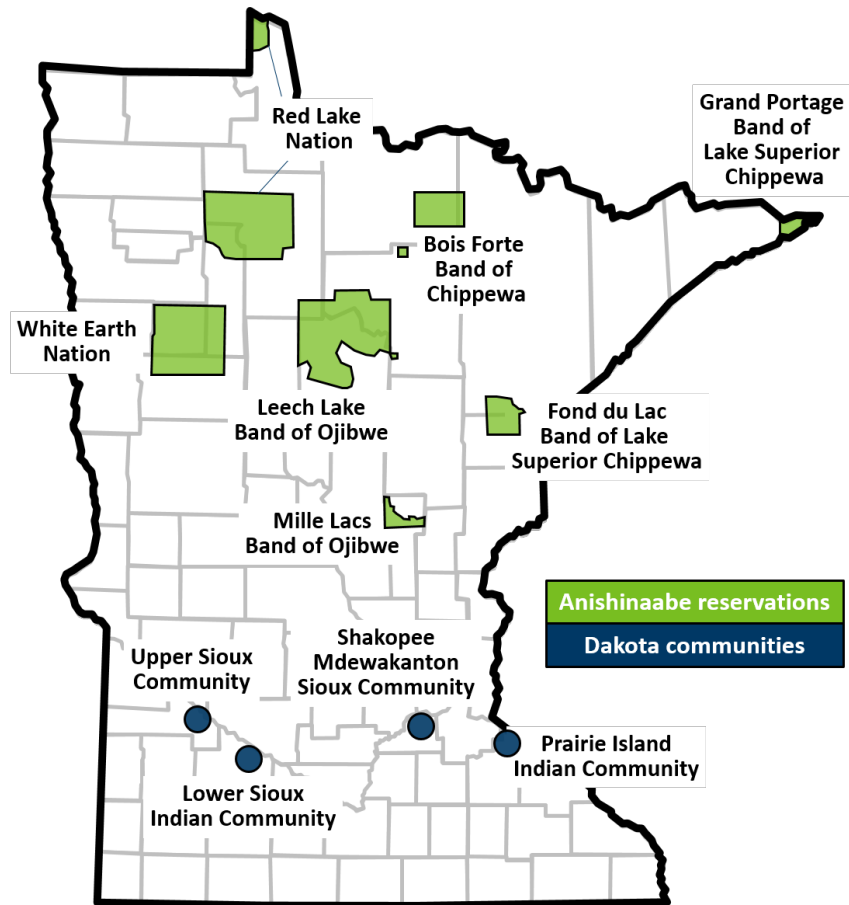
The project team was led by the Indian Land Tenure Foundation (ILTF)/National Indian Carbon Coalition (NICC) and included representatives from the Midwest Tribal Energy Resource Association (MTERA), Slipstream, and LHB.

Energy and Native Nations in Minnesota: Background

There are 11 Native nations that share the same geography as the State of Minnesota and comprise approximately 5% of total Minnesota land area (Figure 1, map from MN Department of Health, 2021). These Native nations are sovereign governments that strive to provide a quality life for their members for generations into the future. Goals around energy conservation, renewable energy production, and greenhouse gas emissions reduction are important to many Tribal governments and members. Each nation is unique in terms of how it plans and pursues energy investment projects. Some nations have dedicated staff positions to develop and implement energy planning. Most, however, have limited internal staff capacity to explore opportunities, define a strategy, plan projects, pursue funding, and ensure successful construction and commissioning. For these nations, energy efficiency projects simply do not happen despite intense interest in investments that enhance sovereignty, increase sustainability, improve reliability, and lower electric costs.

¹ CIP helps households and businesses save energy and money, and is funded by ratepayers and administered by electric and natural gas utilities. More details on CIP can be found at the [Commerce Conservation Improvement Program webpage](https://mn.gov/commerce/industries/energy/utilities/cip/) (<https://mn.gov/commerce/industries/energy/utilities/cip/>).

Figure 1: Map of 11 Indigenous Lands in Minnesota



We recognize that Indigenous lands include ceded and unceded territories throughout the State of Minnesota. For this research, we used shape files that incorporate current reservation boundaries to inform our study. Data extracted from the 2019 Minnesota Energy Efficiency Potential Study shows energy consumption in buildings on Indigenous lands comprises approximately 0.8% of electricity and 0.3% of natural gas use in Minnesota (Nelson, et. al, 2018). People who live in homes on Native lands are more energy reliant on electricity, purchased fuels, and/or wood for space heating and water heating compared with the rest of Minnesota. In general, residential buildings on Indigenous lands are newer than those in the rest of Minnesota. The average income of residents living on Indigenous lands is lower than the average income of Minnesotans living outside of them.

Electric and natural gas utility costs are a significant expense for Native nations. Tribal governments must operate their buildings without income from a traditional tax base. Utility expenses can be one of the largest monthly expenses for Indigenous customers (Schaff, 2020). Each Native nation within Minnesota currently relies on third party non-tribal entities (i.e., investor-owned and consumer-owned utilities) to provide power to customers on Indigenous lands. One of the best first steps Native nations can take to reduce energy costs for their members and businesses is to pursue energy efficiency and conservation investments. However, many valuable energy efficiency and conservation projects are not happening on Indigenous lands. This study explored the issue of barriers to implementation to provide recommendations for resources that will serve the needs of Tribal governments and members.

Methodology

Stakeholder Engagement

Stakeholder engagement was a critical component of this study. Our team relied on input from primary sources to identify barriers and opportunities for the 11 Native nations in Minnesota to see greater benefits from energy efficiency investments through the State’s Conservation Improvement Program (CIP). We utilized the following engagement strategies:

1. established a Tribal Advisory Committee,
2. conducted individual interviews with Indigenous representatives, and
3. conducted individual interviews with representatives of energy utilities that serve Tribal governments and members.

Throughout the study period, we gathered feedback from the Department of Commerce, Tribal Advisory Group, Tribal representatives, and energy utility representatives to provide perspective, meaningful guidance, and accountability.

Tribal Advisory Committee

For this study, the project team recruited one or more representatives from each Native nation that shares the same geography as Minnesota to serve on a Tribal Advisory Committee. Three virtual advisory committee meetings were held in 2021. Originally, four meetings were scheduled, but the project team decided to hold semi-structured individual interviews with Tribal representatives in lieu of one of those meetings to get more in-depth feedback and address difficulties in getting full participation in the group meeting setting. These participation challenges may be due to limited staff time and impacts of the COVID-19 pandemic, increased workloads, and conflicts during the scheduled meetings. These same challenges were also found to be barriers to the Native nations’ engagement in energy efficiency programs. Table 1 below illustrates that nine Native nations were represented at the first advisory committee meeting, six participated in the second meeting, five attended the third meeting, and four individuals engaged in the one-on-one interviews. All 11 Native nations were represented in at least one Tribal Advisory Committee meeting or interview.

Table 1: Tribal Advisory Committee Members and Attendance

Native Nation	Invited Participants	Meeting 1	Meeting 2	Meeting 3	1-on-1 Interviews
Bois Forte Band of Chippewa	Theresa Morrison	X	-	-	-
Grand Portage Band of Chippewa Indians	Marilyn Bowes	X	-	-	-
Fond du Lac Band of Lake Superior Chippewa	Bruno Zagar and Ed Jaakola	X	X	X	X
Leech Lake Band of Ojibwe	Brandy Toft and Anthony Mazzini	X	X	-	X
Lower Sioux Indian Community	Deb Dirlam	X	-	-	-
Mille Lacs Band of Ojibwe	Charlie Lippert and Andy Boyd	X	X	X	-
Prairie Island Indian Community	Jessie Seim and Lars Lindahl	X	X	-	-
Red Lake Band of Chippewa Indians	Hunter Boldt and Robert Blake	X	-	X	X
Shakopee Mdewakanton Sioux Community	Simeon Matthews and Clifford Crooks	X	X	X	-
Upper Sioux Community	Amanda Wold	-	X	-	-
White Earth Nation	Mike Triplett	-	-	-	X

Tribal Advisory Committee Meeting #1 – January 21, 2021

Meeting summary: This meeting introduced the project and the project team to the Tribal Advisory Committee. Representatives from the Minnesota Department of Commerce provided an overview of CIP. The project team outlined the program goals, timeline, and role of the advisory group. We started a discussion of energy-related issues relevant to each Tribe. This meeting set the stage for subsequent advisory committee meetings.

Tribal Advisory Committee Meeting #2 – April 14, 2021

Meeting summary: This meeting provided an opportunity to review CIP and related Department of Commerce efforts. Department of Commerce staff provided an historic and programmatic overview of CIP and its relationship to other Commerce programs. This meeting moved more quickly than the previous into each Tribal representative’s perspective on deploying energy efficiency at facilities on their lands, and what resources or funding opportunities they have pursued to support energy reduction efforts.

Tribal Advisory Committee Meeting #3 – November 3, 2021

Meeting summary: In this final advisory group meeting, the project team summarized the study findings and presented a draft of our final recommendations to the group. The discussion focused on Tribal representative feedback to ensure that the study’s recommendations reflect their needs.

Tribal Representative One-on-One Interviews

From July to September 2021, the project team members Jake Glavin of MTERA and Jeannette LeZaks of Slipstream conducted four individual phone/virtual interviews with Tribal representatives. Please refer to the Results section for a summary of feedback and Appendix A: Stakeholder Engagement Details for the list of interview questions.

Energy Utility Representative Interviews

From February to May 2021, project team member Maureen Colburn of LHB conducted 11 individual phone/virtual interviews with energy utility representatives, as shown in Table 2. These energy service providers included one municipal utility, seven cooperatives, and three investor-owned utilities. Our initial list of utilities was developed with input from Minnesota Department of Commerce as well as our project team’s understanding of the utilities that serve Native nations. Together they serve eight of the 11 Native nations that share the same geography as Minnesota. We are missing representation from the Grand Portage Band of Chippewa Indians, Lower Sioux Indian Community, and Upper Sioux Community because we did not find a utility representative that was willing to participate in these interviews.

All utility interviewees hold the role of member services, energy services, or both within their utility. Please refer to the Results section for a summary of feedback and Appendix A: Stakeholder Engagement Details for the list of interview questions and notes.

Table 2. Energy utility representative interviews

Energy Utility	Native Nations Served	Interviewees
Beltrami Electric Cooperative	Leech Lake Band of Ojibwe, Red Lake Band of Chippewa Indians, White Earth Nation	Sam Mason
CenterPoint Energy	Mille Lacs Band of Ojibwe, Shakopee Mdewakanton Sioux Community	Emma Schoppe and Ethan Warner
Dakota Electric Association	Prairie Island Indian Community	Dave Reinke
East Central Energy	Mille Lacs Band of Ojibwe	Mark Nelson
Lake Country Power	Bois Forte Band of Chippewa, Fond du Lac Band of Lake Superior Chippewa, Leech Lake Band of Ojibwe, Mille Lacs Band of Ojibwe	Todd Johnson and Barb Schmit

Energy Utility	Native Nations Served	Interviewees
Mille Lacs Energy Cooperative	Mille Lacs Band of Ojibwe	Jana Fremling
Minnesota Power	Fond du Lac Band of Lake Superior Chippewa, Leech Lake Band of Ojibwe	Katie Frye
Minnesota Valley Electric Cooperative	Shakopee Mdewakanton Sioux Community	Marvin Denzer
Otter Tail Power Company	Leech Lake Band of Ojibwe, White Earth Nation	Jason Grenier and Roger Garton
Shakopee Public Utilities	Shakopee Mdewakanton Sioux Community	Sharon Walsh
Wild Rice Electric Cooperative	White Earth Nation	Tom Houdek

Estimating Energy Savings Potential

In 2018, the Minnesota Department of Commerce funded the Minnesota Energy Efficiency Potential Study which quantified potential energy savings for the decade beginning in 2020. The Potential Study estimated markets and demographics, developed energy savings calculations for 303 measures across the residential, commercial, and industrial sectors, and estimated the achievable savings for seven different analysis regions of the state. The Potential Study included three types of potential:

- **Economic potential:** A subset of technical potential that is cost-effective.
- **Maximum achievable potential:** A subset of economic potential that is achievable assuming market barriers exist, but 100% of the measure’s incremental cost is covered.
- **Program potential:** The subset of maximum achievable potential assuming only 50% of incremental costs are covered by rebates. We focus on program potential throughout this report.

The Potential Study examined measures that could be applied statewide but did not explicitly identify savings from Indigenous lands or for Indigenous members. In this current analysis, we addressed that gap by estimating the proportion of potential savings attributable to Indigenous lands. We recognize that Indigenous lands include ceded and unceded territories throughout the State of Minnesota. For this research, we used shape files that incorporate current reservation boundaries to inform our study. To achieve this estimate, we calculated the percent of total statewide consumption that Indigenous lands account for across end-use, building type, and utility type. End-use and building type factors were vital as our exploratory analysis identified key differences between building and equipment stock on Indigenous lands compared to the rest of Minnesota. Utility-type was similarly important, as we identified that 77% of electricity consumption is through electric co-ops 96% of gas consumption on Indigenous lands is from investor-owned utilities.

The statewide consumption dataset included entries for all residential homes and commercial buildings in the state of Minnesota. Each entry included modeled end-use energy use for the home or building, the geographic location, the utility, and the specific housing or commercial building type. The energy use consumption data was based on secondary sources such as CBECS, RECS, and US Census data. For commercial buildings, we used the business address and Indigenous land coordinates to determine which were on and off Indigenous lands. On the residential side, we intersected township parcels that overlaid Indigenous lands using GIS. To apportion energy use to areas where townships and Indigenous lands boundaries did not match, we assigned a random sample to the homes based on the portion of homes inside and outside Indigenous lands. We then summed estimated energy consumption by end-use, building type and utility type for the state overall and on Indigenous lands. The division of these two values resulted in the percent of total statewide consumption Indigenous lands account for across utility type, housing type, and end-use. These percentages were applied to the final estimates of statewide potential from the 2018 Minnesota Energy Efficiency Potential Study to estimate total potential for Indigenous lands for the next decade. Results are discussed in the next section.

Results

Stakeholder Engagement

Our stakeholder engagement process is described above in the Methodology section. Below we summarize the input received from Tribal and energy utility representatives. Specifics included barriers and opportunities for Native nations to see greater benefits from energy efficiency investments through Minnesota's CIP.

Tribal advisory group and interview feedback

Energy Efficiency Investments on Indigenous Lands

Historically, Indigenous lands include higher proportions of low-income families. Thus, energy costs can be a significant burden for these vulnerable communities. As each Native nation is sovereign, their approach to energy, resiliency, and sustainability may differ based on the needs, traditions, and location of their people. Some Native nations have formalized energy or carbon reduction goals, while others have worked to increase energy efficiency investments without formal goals. Based on feedback we received during our advisory group meetings, all nations in attendance have completed lighting upgrade at reservation facilities. Several, but not all, nations have implemented weatherization of homes, businesses, other buildings, as well as HVAC upgrades, and energy audits. Many Native nations have made other investments such as solar PV, or EV charging. Only a small portion of the Native nations that attended our advisory committee meetings stated that they were not sure if they had implemented any measures or upgrades.

Barriers to Meeting Indigenous Energy Goals

We identified several barriers and challenges that Native nations face when working to reduce energy use or achieve energy goals. A primary barrier is staff time and other resources to devote to energy reductions or similar goals. The staffing challenge is exacerbated by the COVID-19 pandemic. Many Tribal staff were furloughed or placed on administrative leave. Many Native nations retained minimum staff that mostly worked from home and added additional responsibilities for the furloughed employees. As these nations restarted operations, many employees continued to work from home and added more responsibilities to their duties. This caused many Tribal employees to work in unfamiliar areas and address issues with little to no experience. As Native nations began to rehire staff the more experienced and higher paid staff members had either retired, found new positions with different organizations, or were not brought back. This loss of institutional knowledge by experienced Tribal staff was one of the main issues with outreach to these nations as many employees stated they had little to no working knowledge of the Conservation Improvement Program.

Another barrier to energy conservation are silos that often exist between different operations within each nation. While energy touches many parts of Tribal operations, it is typical the responsibility of the staff to determine how to deal with energy and housing in a variety of ways: weatherization and fuel assistance, housing and urban design (HUD) housing, Indigenous lands and home purchases and sales. These separate departments frequently operate under different long-term goals with energy goals rarely being discussed. Further, environmental staff may develop an energy plan but may not be able to obtain valuable input from all departments that may be affected by the energy plan. Finally, Tribal

Governing Boards may develop strategic energy plans and coordinate energy audits and upgrades without the input of all internal departments due to the necessity to complete the plan.

Relationships between Native Nations and Utilities

We explored the relationship between Native nations and the energy utilities that serve them. We discovered that these nations often viewed their utility relationships poorly. Several issues drove this sentiment, including: Indigenous customers are charged higher rates for casinos and hotels compared to other similar businesses in the region; a lack of new infrastructure or services to Indigenous lands; misalignment between utility staff and the nations' priorities; and utilities' poor communication and working relationships with Tribal staff. The Tribal representatives also explained that outreach by the utilities to explain the benefits of the CIP was minimal if at all. It was also suggested that as the Minnesota Department of Commerce has workshops on energy audits, energy efficient measures, code changes, and energy workshops these could be communicated and shared with Tribal staff.

Indigenous Feedback on Conservation Improvement Programs

While many Native nations had strong interest in the development of energy efficiency projects for their buildings, they indicated that the CIP funding would be insufficient to impact those efforts. Some Tribal representatives stated that their energy efficiency updates have costs estimated to be in the millions of dollars.

When state funding for efficiency measures was discussed at the advisory group meetings, we heard general confusion from Tribal representatives about what funding is offered through CIP compared to what is offered in other Commerce programs (such as the investment grade audits of the Guaranteed Energy Savings Program [GESp]). Similarly, the discussion at the advisory group meetings underscored the potential for confusion around separate programs offered through electricity service providers and natural gas providers; where they are separate entities, the nations need to work through separate channels, which poses a barrier to streamlining the process. Many Tribal representatives indicated a lack of knowledge about how to access CIP funding.

Energy Utility Representative Interview Findings

The interviews focused on the utility's relationship with Tribal governments and members. This included approaches to communications with Tribal representatives and outreach regarding energy efficiency programs. Successes and challenges with CIP participation were also discussed as they apply to both Indigenous and other customers in the utility's service area.

Utility-Indigenous Relations

Most interviewees say they "treat all customers and members equally" and take the same approach to communications and service for all. Key account representatives typically serve specific clients, not related to Tribal government or members. Many cited strong account manager relationships with casino facility staff. Some utilities meet with Indigenous leadership, some only with the nation's housing or environmental staff. A few do not engage directly with their Indigenous customers.

Strategies for successful engagement with Tribal representatives were discussed. When Native nations have an energy champion or ambitious energy reduction goals, some interviewees noted they have

engaged in providing energy data and/or participating in early discussions for construction project planning. One utility meets each November with Tribal housing staff to identify specific weatherization projects to be implemented in the coming winter. Another utility works to maintain relationships with the heads of all departments in the Native nation within their service area by holding an annual community gathering that includes food.

The biggest challenge hindering the relationship between Native nations and their utilities is communication. One reason is due to staff turnover at the utility, casino, and/or Tribal government. One interviewee noted their utility's internal coordination issues with different departments talking with different Tribal representatives and not communicating with each other. Some interviewees mentioned a desire to hear from Native nations about upcoming new construction projects or their interest in energy efficiency programs. There was one request for recommendations on how to target outreach and communications specifically to Indigenous customers.

Conservation Improvement Programs

Utility interviewees described similar CIP offerings including home energy audits, weatherization programs, and rebates for efficient equipment, appliances, and lighting. Most programs are prescriptive; one interviewee noted that their commercial/industrial programs are performance-based. Several utilities offer income-qualified programs. A distribution cooperative noted that they are limited in their program options by Great River Energy. Utilities promote their CIPs using similar methods including on their websites, monthly newsletters, bill inserts, social media, and phone calls.

Most interviewees claimed high participation rates in their programs for air source heat pumps and energy efficient lighting. When asked about successes specifically related to Tribal governments or members taking advantage of CIPs, partnerships with energy assistance agencies, casinos, and new health care facilities were highlighted. Several utilities noted casinos taking advantage of incentives for energy efficiency including lighting and motor retrofits, interruptible service programs, and new construction strategies such as geothermal. Participation in income-qualified programs through work with area energy assistance agencies was also frequently mentioned. One utility recently added a dedicated staff person for income-qualified work combined with conservation improvements with the goal of increasing participation across programs.

Basing decisions on costs, access to funding, a desire for different types of programs, and challenges with program structure were the barriers to CIP participation cited most frequently in the interviews. Many of these barriers were applicable to all utility customers/members and not specific to Tribal governments or members. The following is a sample of interviewee comments related to these barriers:

- Cost-based decision making
 - When propane rates were high, there was more desire for high efficiency equipment. Now the rates are lower, and the cheapest systems are being installed.
 - For rental units, the incentives for owners and renters are different and may not lead to taking advantage of programs.
 - Moderate income customers that do not fit income qualifications might not pursue improvement projects.
- First cost is a hurdle for many customers.
- Access to funding
 - Customers rather use state weatherization funds or find clean energy partnership agencies than choose utility programs.

- New construction work often needs a referendum which slows down potential efficiency projects.
- Indigenous customers may have different funding opportunities than other customers.
- Desire for different programs
 - We need electric vehicle programs for income-eligible customers.
 - We have found Indigenous customers to be more interested in solar than other customers, and some focus on renewable projects rather than energy efficiency.
 - Some programs are outdated. For example, LED rebates are not needed now that the market has adopted them.
- Barriers due to program structure
 - Historically, we have offered programs in a siloed fashion with some by the conservation improvement team and some by the renewable energy team. Now we are looking at how to holistically serve customers.
 - We are challenged by limited staff time and cannot afford to hire a person just to work on conservation improvement programs.
 - State reporting requirements causes some utilities to put programs in little buckets rather than a holistic approach.
 - We are concerned about the structure of the conservation improvement program – soon we will run out of lighting savings.

Discussions with the utility representatives tell only part of the story. Most interviewees reported limited engagement with Tribal governments and members regarding energy efficiency or CIP participation. Overall, the interviews indicated that little interaction is occurring between energy utilities and Tribal representatives regarding energy reduction initiatives.

Estimating Energy Savings Potential

This section includes a summary of the residential and commercial energy savings potential on Indigenous lands; we provide an overview of the building and equipment stock differences between Indigenous lands and the rest of Minnesota as well as the energy savings potential results by end-use for each sector. Lastly, we summarize the potential emissions savings for each sector. The calculations used to derive these estimates are described above in the Methodology section.

Residential

The housing and equipment stock significantly impacts the type of energy efficiency opportunity potential. There are several key housing type and space conditioning differences between on-reservation and off-reservation homes. Generally, single-family and manufactured homes represent a larger percent of the total housing stock on Indigenous lands compared to the rest of the state (Table 3).

Table 3. Housing type breakdown on and off Indigenous lands

Type of Housing	On Indigenous Lands	Off Indigenous Lands
Single-family	81%	75%
Manufactured home	12%	3%
2-4 unit	3%	4%
5+ unit	4%	18%

Native nations use a substantially lower percent of natural gas for space heating and a substantially higher percent of electricity, propane, wood, and oil, compared to the rest of the state. Similarly, the energy requirements on Indigenous lands are comprised of a lower percentage of natural gas and substantially more electricity and propane for water heating. Homes within Indigenous lands use less air conditioning compared to the rest of the state, which decreases the potential for cooling energy savings on Indigenous lands. Table 4 illustrates key differences in equipment stock on Indigenous lands compared to the rest of the state.

Table 4. Equipment stock characteristics on and off Indigenous lands

Equipment	Categories	On Indigenous lands	Off Indigenous lands
Heating	Natural gas	16%	64%
Heating	Electricity	26%	16%
Heating	Propane	35%	12%
Heating	Wood	13%	3%
Heating	Other	10%	5%
Water Heating	Natural gas	13%	62%
Water Heating	Electricity	67%	31%
Water Heating	Propane	20%	7%
Cooling	Central AC	42%	58%
Cooling	Room AC	23%	26%
Cooling	None	21%	9%
Cooling	Air Source Heat Pumps	7%	2%
Cooling	Other	8%	9%

These differences in space heating, water heating fuel, and air conditioning use factor directly into the percent of total energy efficiency potential that residents on Indigenous lands account for by end-use.

Table 5 and Table 6 show the proportion of total electric and gas potential each end use accounts for. The undifferentiated end-use includes measures that impact whole home energy use, such as home energy reports. The higher percent of electricity use for water heating and space heating leads to a higher percentage of total electric potential coming from those end-uses. Similarly, space cooling is a lower percent relative to end-uses and compared to off-reservation, which reflects the low utilization rates of cooling equipment. Lighting’s lower contribution to total potential on Indigenous lands may be related to lower lighting energy use per home; however more research is needed to fully understand this difference.

Table 5. End-use contribution to total electric potential on and off Indigenous lands

End use	On Indigenous lands	Off Indigenous lands
Space heating	40%	25%
Water heating	12%	10%
(undifferentiated)	19%	20%
Refrigeration	7%	8%
Appliances	6%	9%
Exterior lighting	3%	4%
Plug loads	2%	4%
Other	<1%	1%
Interior lighting	9%	17%
Space cooling	1%	2%

Table 6 illustrates that the contributions of the end-uses for gas potential is relatively similar across Indigenous lands and the rest of Minnesota. However, Indigenous lands only account for 0.2% of the total statewide gas potential.

Table 6. End-use contribution to total gas potential on and off Indigenous lands

End use	On Indigenous lands	Off Indigenous lands
Space heating	82%	80%
Water heating	8%	10%
(undifferentiated)	10%	10%
Appliances	<1%	<1%

Overall, Indigenous lands only account for between 0.5 and 2.2 percent of total statewide electric potential across end uses. Figures 2 and 3 display the electric and gas program potential for Indigenous lands by end-use and year. The numbers on the top of each bar represent the total residential potential for the year.

Figure 2 illustrates that lighting (exterior and interior together) makes up a sizeable amount of total potential in the first two years. Space heating accounts for the most substantial amount of total potential after those years as air source heat pumps penetrate the market and opportunities for LED replacements wane. Water heating potential also grows over time while undifferentiated measures (e.g., those that impact whole home usage) make up a relatively consistent and significant chunk of electric potential across time.

Figure 2. Annual residential electric program potential by end use on Indigenous lands, 2022-2031

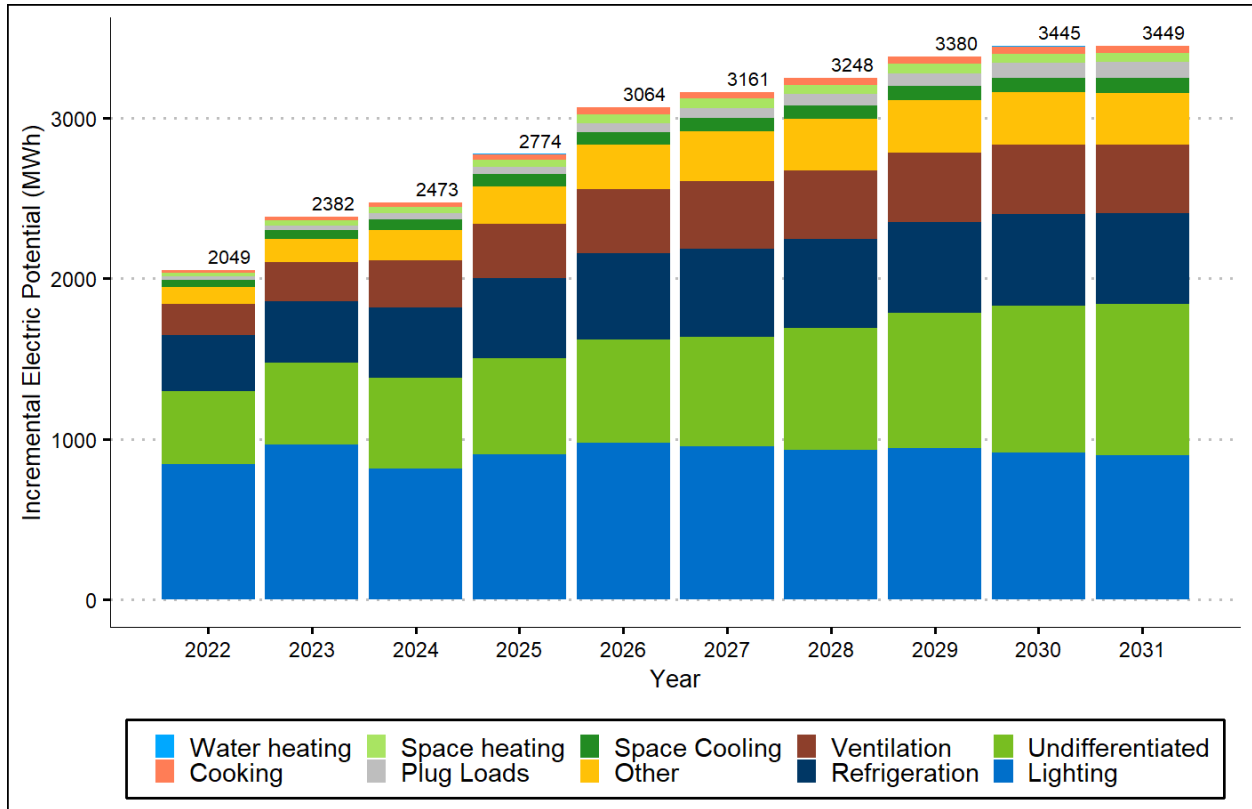
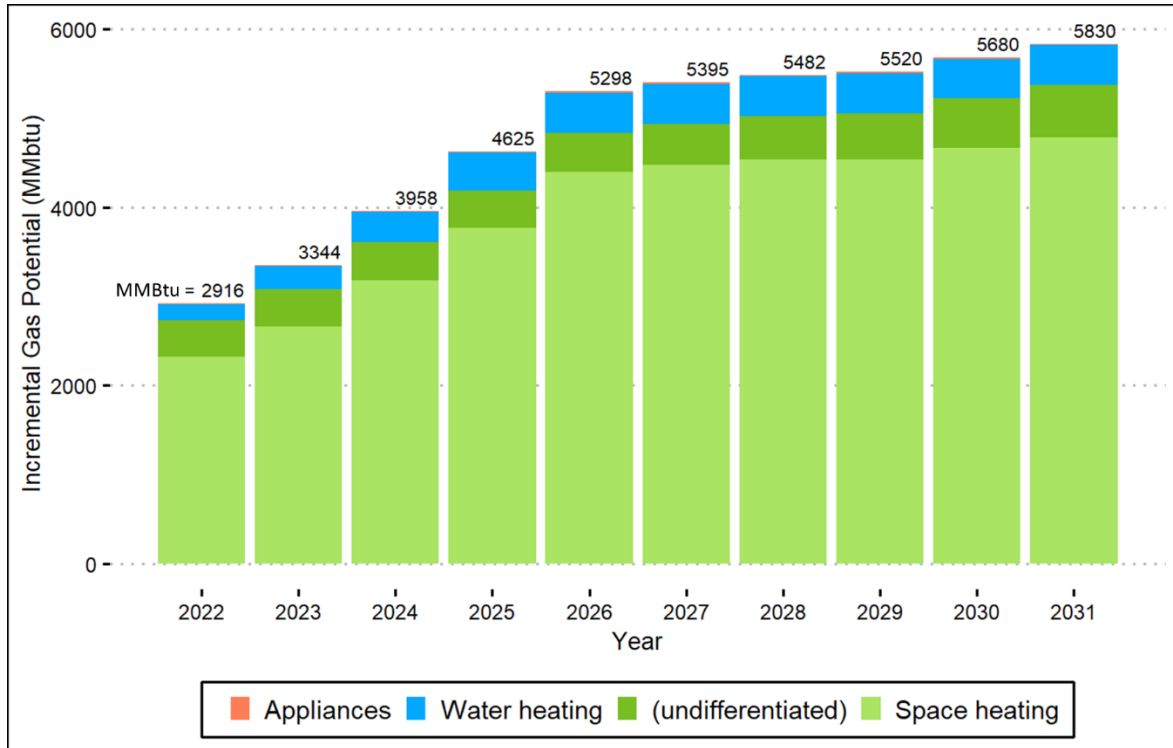


Figure 3 illustrates that space heating makes up most of the gas potential for the next 10 years. Water heating, undifferentiated, and appliance end uses make up the remainder of gas potential.

Figure 3. Annual residential gas program potential by end use on Indigenous lands, 2022-2031



Commercial

Less than 1% of commercial buildings in Minnesota are located on Indigenous lands. This equals less than 1 percent of total statewide commercial potential existing on Indigenous lands across end-use.

Figure 4 summarizes the electric program potential for all commercial buildings on Indigenous lands by end-use and year. Lighting and undifferentiated (whole building) end uses make up most of the electric potential across all years. Other major contributors include refrigeration and ventilation, while the other end uses contribute a less significant amount.

Figure 4. Annual commercial electric program potential by end use on Indigenous lands, 2022-2031

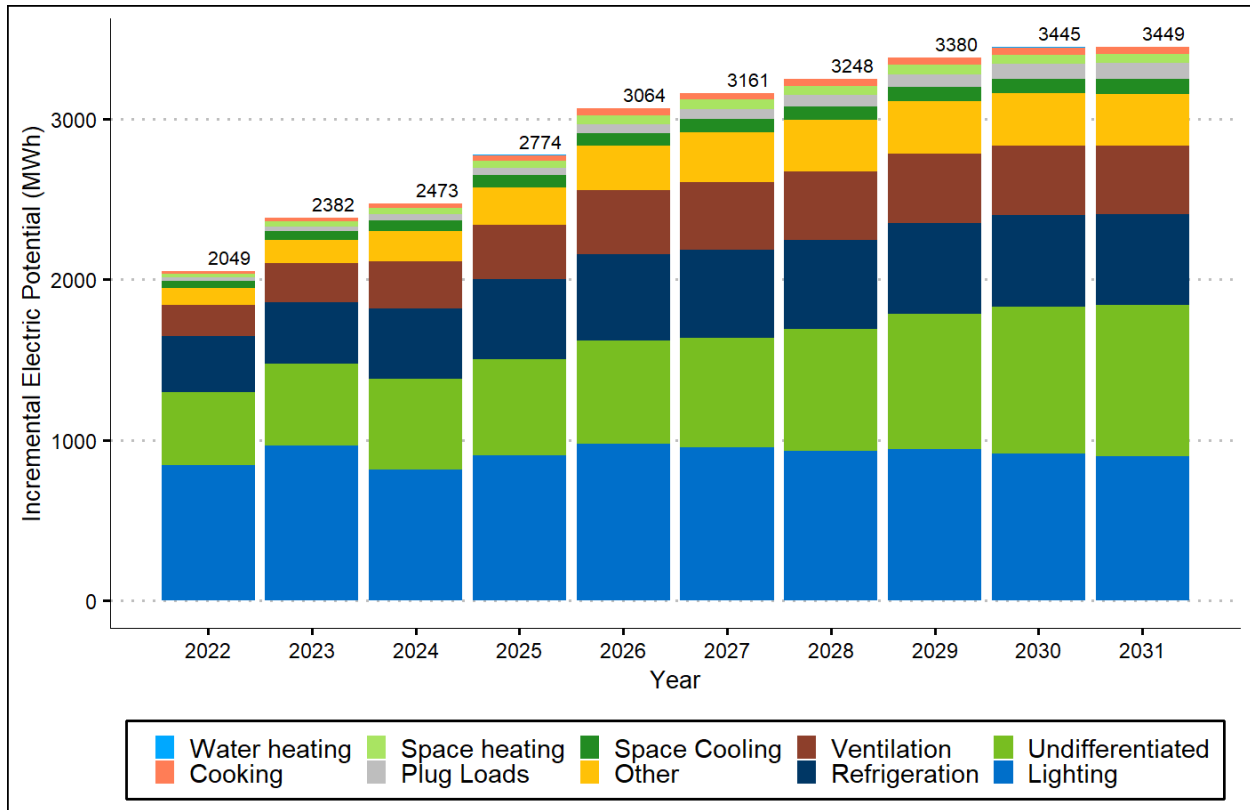
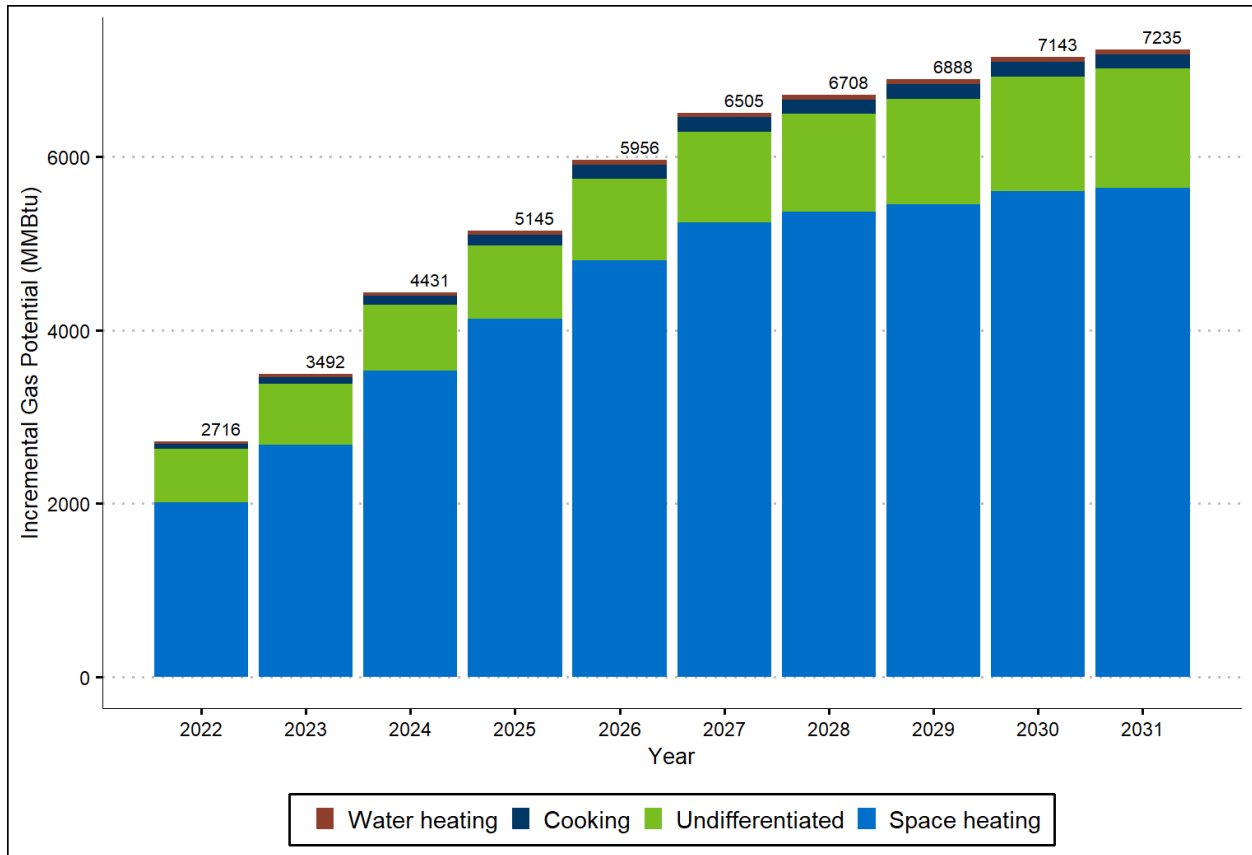


Figure 5 illustrates the annual gas program potential for commercial buildings on Indigenous lands across end-use for the next 10 years. Space heating makes up most of the gas potential, followed by whole building measures.

Figure 5. Annual commercial gas program potential by end use on Indigenous lands, 2022-2031



Emissions Impact

The emissions potential savings on Indigenous lands accounts for less than 1 percent of total emissions potential in the state. Table 7 details the annual emissions impact for the commercial and residential sector. The residential sector accounts for 70% of total emissions potential in the first two years, and at least 60% of the total emissions potential for the rest of the years.

Table 7: Annual emissions potential

Year	Commercial Emissions (tons)	Residential Emissions (tons)	Percent of Statewide Emissions Potential
2022	1033	2398	0.65%
2023	1172	2701	0.65%
2024	1259	1820	0.62%
2025	1421	2191	0.63%
2026	1533	2431	0.63%
2027	1600	2547	0.64%
2028	1645	2589	0.64%
2029	1707	2647	0.63%
2030	1637	2515	0.62%
2031	1643	2517	0.63%

Recommendations

This study provides new insights and important stakeholder feedback from both Tribal and energy utility representatives. In addition to identifying CIP participation uplift barriers, several important questions are raised. After our information review, we sought to distill recommendations to meet the original goals of this project and consider how overarching systems might be modified to simultaneously meet state climate, energy, and equity goals as well as increase the benefits to be gained for Native nations. The study's recommendations are driven by the identified needs for programs and resources that more holistically address Indigenous climate and energy goals, improve communications between all stakeholders, and provide a more coordinated approach for Native nations to invest in their communities.

The project team also calculated the energy efficiency potential of investments made on Indigenous lands. As described above, differences on Indigenous lands include increased prevalence of electric space heating and an increased proportion of low-income households; these are areas that utility programs could focus on addressing in the future. While our recommendations largely stem from feedback gathered through the stakeholder engagement process, there are some key takeaways from the energy efficiency potential analysis that could help inform utility programming that targets Indigenous customers. For example, upgrading to air source heat pumps for space conditioning would provide a more efficient space heating technology than electric resistance heat. Also, Native nations would benefit from utility programs that identify ways to reduce energy burden in low-income households. Our recommendations based on feedback gathered through our engagement process are as follows:

Dedicated Resources: Provide dedicated resources for Native nations to develop and implement energy and climate plans that incorporate CIP across a portfolio of projects benefiting people and businesses on reservation.

Native nations in Minnesota have a range of goals that pertain to energy and climate changes in the future. Each nation approaches these goals in different ways. The goals may be formalized through Tribal resolutions or with the creation of a staff position focused on energy, resiliency, and/or climate action. Yet, as described above, these nations are not only limited by funding to invest in achieving formal and informal goals but also the staff time to dedicate to these initiatives. When energy conservation projects are undertaken, they are typically completed one building at a time which does not maximize the scarce resources of Native nations or utilities.

We recommend that the state of Minnesota invest in new pathways to support Native nations in meeting their internal goals that will also benefit statewide climate goals. This could include dedicating a Commerce staff liaison between each Native nation in Minnesota and their energy utility service providers. This would ensure that CIP resources are considered and pursued in a holistic approach to energy efficiency upgrades across buildings on Indigenous lands. For successful implementation, we recommend this strategy include financial support for each Native nation to employ staff who are dedicated to developing and implementing energy and climate plans that incorporate CIP resources. Working together, Commerce staff and Tribal staff could also better leverage existing resources such as those provided through partnership and cohort-based organizations such as MTERA.

Guidance: Develop guidance for energy service providers on strategies for connecting with Indigenous leaders, staff, and members.

Through our conversations with utility representatives, we found that there was a variable level of understanding on effective ways to connect with Tribal customers and members. Although some utilities have a Tribal liaison or representative, many expressed that they do not see the need to provide targeted communications to Tribal governments or people living on Indigenous lands. Even when relationships are established, some utilities see challenge in maintaining continued communications with the Native nations due to staff turnover on both sides.

Effective communication strategy includes targeting messages to a specific audience. We recommend the development of guidance for utilities to maximize their communications with Native nations. This could include development of websites, emails, and social media posts that specifically address the values of Indigenous customers and leadership. These communications could provide clarification on the role of energy efficiency and conservation investments in meeting Indigenous energy goals. Energy service providers could be encouraged to partner with Tribal representatives and organizations to build trust around the messaging.

Improving utility-Native nation relations will require more than targeted messaging. Investment is needed to build individual relationships between energy service provider representatives and Indigenous leaders, staff, and members. We recommend that each utility serving Indigenous customers allocate resources for a Tribal liaison. Ultimately, this increased emphasis on augmenting communications with Native nations will foster deep relationships between Indigenous communities and their utilities. This intentional act can enable more effective partnerships in achieving energy conservation goals.

Collaboration: Support the Tribal Energy Council comprised of representatives from each of the 11 Native Nations in Minnesota.

Tribal representatives indicated that the understanding of existing CIP and Commerce resources varied from nation to nation. Depending on the nation's relationship with their utility, some may take advantage of CIP funding more or less than others in the state. This recommendation targets the information gap between Native nations and leverages the partnership amongst them to close gaps and support the implementation of the Tribal Energy Council.

This Tribal Energy Council concept has already been developed and our recommendation amplifies and supports its usefulness to increase participation in CIP. In November 2020, the Minnesota Indian Affairs Council (MIAC) voted to create a Tribal Energy Council via Resolution 11102020_01 (MIAC, 2020). The intent of the Tribal Energy Council is to share resources and ideas on ways to improve energy and climate resiliency for Indigenous peoples. This Council could be a place for Commerce to provide direction on ways that Native nations can leverage existing funding, including CIP funding. These nations will share experiences and best practices to help all members navigate existing utility programs, services, and systems.

New approaches for Native nations: Consider a new approach: develop a pilot program that outline a process and then demonstrate how these nations can administer and direct their own energy efficiency investments.

Our study found that current state and utility programs for financing energy efficiency projects are not easily accessed by Native nations and are leaving energy savings opportunities on the table. With scarce resources especially for staff time, these nations need a streamlined approach to accessing funding and implementing projects at scale across their lands. Organizations like MTERA are working to address the inefficiencies in how funds and resources are distributed to Tribes. MTERA's primary goal is to empower

Tribal staff to manage energy projects and resources on Indigenous lands. A major aspect of that goal is ensuring Tribal staff are aware of and pursue funding opportunities like CIP. Native nations also need more autonomy to make decisions about effective implementation of energy efficiency funding.

We recommend developing a pilot program for two to three Native nations in Minnesota to outline a process and then demonstrate how they can administer and direct their own energy efficiency investments. Along with the above recommendations of a dedicated Tribal staff person and Tribal Energy Council, this pilot's participating nations will have the foundation to prioritize and implement energy investments in a way that most closely aligns with their sovereign goals. This new approach will address the disconnect that Native nations feel between their energy, climate, and resiliency goals and how they work with utilities through CIP to achieve those goals. This pilot will address direct energy investments as well as workforce development strategies to foster the younger generation of Indigenous peoples to conduct and implement the energy efficiency investments. The Native nations in this pilot will work in partnership with the state to ensure that funding is strategically used and tracked according to both Minnesota and sovereign goals.

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Appendix A: Stakeholder Engagement Details

Tribal Representative Interviews

Interview Questions

Energy Reduction Goals

1. Who is working on climate/energy/environmental issues in your Tribe (leaders, staff, members)?
2. Whose role is it to work on energy savings in Tribe-owned buildings? If no one has this role, what needs to change to make it possible?
3. Has your Tribe created any energy/carbon/climate/environmental goals?
 - a. If you don't have any, what do you think it would take to get energy reduction goals in place? Probe on barriers and how can the barriers be addressed?
4. What energy conservation measures have you done?
5. What energy-related upgrades do you want to make in the future? [probe on likelihood of making these upgrades, and barriers and opportunities]
6. Where do you look for funding for energy investment projects?
7. Questions about leveraging MTERA: Are you connected with MTERA? Have you worked with MTERA to connect with energy resources? How could MTERA help your Tribe?

Energy Utility Relationship

1. How would you characterize your utility relationship? [probe on challenges with relationship, positive aspects]
2. What do you wish your utility would provide your tribe?
3. Does the Tribe have a utility liaison?
4. Do you know who to contact at the utility?
5. Who in your Tribe is tasked with utility relationships?
6. What are the best ways for electric/gas utilities to provide outreach about energy efficiency programs?
 - a. Meetings with Tribal leaders?
 - b. Meetings/phone calls with Tribe liaisons who work with buildings?
 - c. Community education through pop up events on reservations or at events?

Indigenous Residents and Businesses

1. Do you have a sense for the level of energy efficiency of the residential buildings on reservation? Off reservation?
2. Do you have a sense for the level of energy efficiency of the commercial buildings on reservation? Off reservation?
3. How many Tribal members need energy assistance?
4. Would a Tribal member who requested energy assistance also be considered for food assistance (and vice versa)?
5. If Tribal members needed energy assistance, would they reach out to Tribal staff, or elsewhere? (e.g. their utility)

Tribal Stakeholder Input

Energy efficiency goals and past upgrades

- Time is the main constraint – the main driver is the need to get houses up.
- Energy audits preferred with recommendations prior to the start of building renovation. In the past that worked. We have less staff now.
- We don't have any set goals, but we've received feedback from Tribal members that is cool. We want something attainable.
- We need more studies to back up our goals (e.g., what does it mean to say that we cut our emissions by 40%?).
- I don't have the staff to accomplish these goals.
- In the short-term, we are pursuing goals that we know we can attain.
- We look to state (MPCA, MNDOT, CERTs) and federal (DOE, DOI, EPA) agencies for funding.
- Tribal housing is a disaster. A lot is "crap" housing, needs everything to get upgrades. All but tear the house down to make those upgrades.
- We look to Tribal energy program through DOE, USDA rural development (although we've never done anything in that).
- Would like to see investment – take control of their own energy. Had some people who were "deaf for two years" and now want to do something overnight.
- Tribal housing authority includes half of the buildings on the reservation.
- Not really familiar with CIP but resources are infinitesimally small.
- Federal Energy Conservation program – has been around for years but resources don't get very far. Nobody is designated to do this.
- Our tribe has people who are looking at climate, energy, and environmental issues. The energy work is growing fast, due to internal Tribal leadership and passion.
- We are just getting started on our energy efficiency journey.
- The Tribe is doing some stuff like LED lighting but not to the extent that the Tribe should be doing.
- Part of what the Tribe is doing is trying to educate the community. The Tribe will be handing out energy efficiency kits as part of the upcoming training.
- The CUB is helping the Tribe with this. This is the first time the CUB is helping a Tribe.

Utility relationships

- We communicate monthly and know about prescriptive programs and rebates.
- The utility does what it has plans for and lets us know what they are doing with other partners.
- We would like more advance notice of opportunities they are offering other customers.
- No one in the Tribe is tasked to manage utility relationship. Communications are on an as-needed basis.
- We've been taken to the cleaner with some of the utilities.
- For the most part, the utility relationships are pretty workable.
- The cooperative's relationship is average to poor.
- We don't have what I would call tribal liaisons - we have two points of contact at the utilities. There is no one at the Tribe that is tasked with being the point person.

- Repetition. They have enough turnover in leadership. Need the right advocacy organization.
- There has been a disconnect with the utility. Racial issues could be involved but want to be sure that we keep the conversations positive and focus on solutions.
- We have a good relationship with the utility but point person at Tribe is actively involved.
- Wishes that utilities would rethink their business model. The current business model is set up for them to own and benefit from infrastructure. They've signed on long-term power contracts with their utility that reduces options for the Tribe.
- "This is difficult for the utilities because they've never been faced with something like this before" – referring to the utility business model changes.
- Interviewee does not believe that having the State's efficiency program run through utilities is in the best interest of Tribes.

Challenges in Native Nations

- Time is the main constraint – the main driver is the need to get houses up.
- Tribal departments are frequently siloed from one another and have separate relationship with utilities. Tribal governments intentionally setup relationships in this manner as there is proprietary information that cannot be shared for low-income tribal members that access assistance programs.
- Staffing and money for more space.
- Naysayers within government – we welcome them because they are only going to make the project better.
- Liabilities – issues with going into someone's home and doing something and then having an issue.
- There is a lot of intergenerational poverty.
- There is a lack of standards, and ability or interest to upgrade buildings.
- There is mold in housing.

Opportunities for Native Nations

- What worked for them is working with multiple organizations in the Tribe. Need to get everyone involved.
- What worked about GESp:
 - The Tribe went in knowing that we would not be scammed.
 - Their reputation was riding on a successful project.
 - Department of Commerce joint powers agreement was helpful.
 - Trust and leadership confidence in the contractor and process.
 - The Tribe knew that they were not going to get taken to the cleaners.
- It starts with communications. The problem with cooperatives is that they get away with so much. They just don't understand the sovereignty of Tribes.
- For the two IOUs that do have communication lines established, they should share opportunities with us and be as integrated as possible.
- There are truckloads of money coming in through Federal tribal recovery, especially on household solar and microgrids.
- Commerce should provide us with money. Have the Tribe come up with standards. One size doesn't fit all.
- Solar is and isn't all that affordable. Mimic DOE that gives 50%.
- Provide more money for weatherization.

- Teach people to understand their energy bills.

Energy Utility Representative Interviews

Interview Questions

From February to May 2021, project team member Maureen Colburn of LHB conducted eleven individual phone interviews with energy utility representatives, as shown in Table 2. The following questions were asked of each interviewee:

1. What is your role?
2. What are your CIP offerings for commercial/industrial and residential customers?
3. Which tribes are in your service territory?
4. Do you have a contact person within each Tribe in your service territory?
5. What is your approach to engaging with Tribal Governments and Tribal Members? Any specific goals or initiatives?
6. Do you have an example of a Tribal government taking advantage of your CIPs?
7. What are you having success with?
8. What are barriers?
9. What strategies do you use to successfully engage with other customers?
10. Do you have any other input for our team?

Utility Stakeholder Input

The following list categorizes comments documented during the interviews to illustrate both similar and diverse perspectives of the utility representatives.

Utility-Indigenous Relations: Approach

- We rely on a strong account manager relationship with Tribal leadership.
- We have a key account manager who works directly with the Tribal Government and the casino staff.
- We have an account representative working with the casino; for six years the same representative with two or three new facility managers during that time.
- We are focusing efforts on Tribal engagement even more than some other customers.
- We primarily work with Tribes through energy assistance agencies to implement income-qualified programs.
- We have a team that includes our chief executive officer, director of operations, and director of member services that works with the Tribe.
- We sometimes meet with the Tribal Council and also work closely with Tribal maintenance staff.
- We don't take a specific approach to working with Tribal Government leaders but do work with Tribal housing staff.
- We have weekly contact with Tribal staff.
- Our senior staff meets quarterly with Tribal leaders.

- We work with the Tribal Government chief executive and financial officers, business consult, casino general manager, and environmental staff. Many have been in their roles a long time and developed strong relationships.
- We have various contacts with Tribal staff, some manager-specific entities like housing, and environmental specialists, and fewer connections with Tribal leaders.

Utility-Indigenous Relations: Success Strategies

- We provided energy data for a Tribe interested in being a leader in energy reduction.
- We hold an annual meeting with heads of all departments in the Tribe where we provide food and develop relationships.
- The Tribe reached out to include us in early discussions about a major energy reduction project.
- We meet with Tribal housing staff each November to talk about weatherization projects for the winter.
- It helps to have a champion at the Tribal and/or organizational level.

Utility-Indigenous Relations: Challenges

- We find it difficult to maintain relationships with Tribal leadership due to changes with elections.
- If Tribal leadership turns over, we may lose our connections.
- It would be helpful to have recommendations on how to target outreach/communications to Tribal customers.
- It can be a challenge to maintain contact with casino staff due to turnover rate.
- We would like to be informed about upcoming new construction projects on reservations. Homes are often modular/slabs, and we could talk about energy efficiency prior to the houses being ordered.
- We have coordination issues with different departments within our organization talking with different Tribal representatives and not communicating with each other.
- Several of our staff recently retired, and we lost established relationships with Tribe contacts.
- Some projects lose traction due to turnover on Tribal councils.
- We haven't been contacted by Tribes about our energy efficiency programs.

Conservation Improvement Programs: Offerings

- We start with a home energy audit as an entry point for residential customers.
- On the residential side our popular programs include home energy audits, weatherization, and loan offerings. For multifamily, we have many similar offerings plus equipment rebates.
- For residential, incentives on heat pumps and mini-splits are the most popular programs. We find that lighting has already been changed over to LEDs so are no longer seeing significant savings. For commercial, projects are still pursuing lighting savings.
- As a distribution co-op, our programs are established by Great River Energy, and we do not have a choice about what to offer.
- For residential, we see the most participation with air source heat pumps, ECM motors, LED lighting, and appliances.
- Our Tribal customers have strong past participation in conservation improvement programs and renewables. They are looking ahead to electric vehicle programs.

- Our most popular conservation improvement programs are for geothermal and air source heat pumps.
- For Commercial/Industrial, our programs are performance-based rather than prescriptive. For residential, we have prescriptive programs.
- We have income-qualified programs for home energy audits and appliance replacements.

Conservation Improvement Programs: Promotion

- Members learn about programs from our website and monthly newsletter.
- We communicate with customers and agencies through social media, bill inserts, our website, and lots of phone calls.
- We promote programs in our newsletters, local papers, and on our website.
- Our field representatives maintain relationships within our communities.
- We promote programs using bill stuffers, our website, and Facebook.
- We have a monthly publication mailed or emailed to members and available on our website.

Conservation Improvement Programs: Successes

- Income-qualified customers and high-end customers take advantage of our incentives.
- We keep up relationships with our trade allies by providing education.
- Our primary relationship with the Tribe is through their casino. They have implemented lighting retrofits, motor retrofits, and an interruptible service program (backup generation).
- Our air source heat pump program is successful.
- Our primary commercial relationship with Tribal customers is with their two casinos. We have made several visits and have worked closely on new construction at both facilities. They have taken advantage of energy efficiency programs especially lighting retrofits.
- We have provided hundreds of rebates for appliances and air source heat pumps. We typically run out of rebate money in November each year.
- We have a good working relationship with the area energy assistance agency on weatherization projects.
- We maintain great relationships with the electric associations.
- We base our Commercial/Industrial program offerings on custom calculations. It is a flexible program and enables us to engage one-on-one with individual customers.
- We now have a dedicated staff person on income-qualified work combined with conservation improvements and are hoping this will help increase participation across programs.
- The casino has participated in lighting retrofits and now has no smoking policy.
- Our Guaranteed Energy Savings Program-driven projects for solar and lighting have been very successful.
- We implement our programs in-house rather than relying on third party implementers which helps build customer relations.
- We do not discriminate based on conservation improvement program project size. We provide the same level of service for all sizes of projects.
- We have found that Tribal customers have as strong an interest in energy savings as financial savings.
- We have had very large participation in LED retrofits as LED costs go down. Our rebate programs for HVAC equipment are also popular.

- We changed our conservation improvement program to a custom program and are going through our efficiency funding much faster. This is a lot more work for our utility, but we are now able to achieve our savings goal.
- We are working with new Tribal health center on programs for geothermal and lighting. The whole health center team is meeting with the whole utility leadership team.
- The Tribe contacted us about their high energy efficiency goals for a new satellite clinic before starting.

Conservation Improvement Programs: Challenges

- When propane rates were high, there was more desire for high efficiency equipment. Now the rates are lower, and the cheapest systems are being installed.
- Costs are the main driver for decisions.
- For rental units, the incentives for owners and renters are different and may not lead to taking advantage of programs.
- Moderate income customers that do not fit income qualifications might not pursue improvement projects.
- We see customers going to the state for weatherization funds or to clean energy partnerships agencies rather than utility programs.
- We need programs for income-eligible customers for electric vehicles.
- Historically, we have offered programs in a siloed fashion with some by the conservation improvement team and some by the renewable energy team. Now we are looking at how to holistically serve customers.
- Some vendors say it is not worth it to participate due to paperwork requirements.
- New construction work often needs a referendum which slows down potential efficiency projects.
- First cost is a hurdle for many customers.
- Tribal customers may have different funding opportunities than our other customers.
- We have found Tribal customers to be more interested in solar than other customers, and some focus on renewable projects rather than energy efficiency.
- We are challenged by limited staff time and cannot afford to hire a person just to work on conservation improvement programs.
- Some programs are outdated. For example, LED rebates are not needed now that the market has adopted them.
- State reporting requirements causes some utilities to put programs in little buckets rather than a holistic approach.
- We are concerned about the structure of the conservation improvement program - soon we will run out of lighting savings.