



First to Reside, Last to Benefit: A Study of Midwestern Tribal Efficiency



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Abstract

9.7 million people in the United States identify as American Indian and/or Alaska Native. The median energy burden of Native American households is 45% higher than that of non-Hispanic white households, the highest energy burden of any historically excluded group. This puts Indigenous communities at a greater risk for respiratory diseases, stress and economic hardship, all of which can make moving out of poverty more challenging.

Native Americans live in diverse communities, from rural reservations to dense urban areas. Consequently, the issues of these communities vary greatly, and policymakers must take these differences into account when crafting effective legislation and designing programs to meet their needs. Native Americans experience high energy burden in part because their homes and community buildings are inefficient, and tribal communities have historically had challenges in accessing funding to improve their building stock. This paper will explore past and present energy efficiency funding opportunities for Tribal Nations, present three on-reservation case studies of nations in the Midwest who have accessed these resources and provide suggestions for how U.S. government agencies can expand and improve funding mechanisms for all tribal entities.

Introduction

Indigenous people have been caring for the earth since time immemorial. Their relationship to the land was and still is one of respect and mutual appreciation. Though colonization forcefully confined Indigenous people to borders drawn by the United States government, their relationship to the land is not defined by paperwork. The federal U.S. government recognizes a tribal area as those deemed reservations during treaties or other bureaucratic processes, but reservations are not the only places that Indigenous communities reside today.

Indigenous people represent a large portion of the United States population. Today, 9.7 million people in America identify as American Indian¹ or Alaska Native (ICT 2021). This population is diverse: Indigenous people come from many nations, speak a number of languages and reside in areas of varying population density. There is no single narrative for an Indigenous or Alaska Native experience, nor the needs they may have. Due to the complex structure of Indigenous communities in the United States, policies and programs must be explicitly developed to serve them.

It is important to note that while this paper addresses gaps in funding for Indigenous communities, the authors of this paper are not Indigenous themselves. The best way to enact policies or programs for Indigenous people is to directly engage these communities in a collaborative manner. Despite facing historic divestment, tribal nations have continuously worked to support their communities. Tribes who operate

¹ The term "Indian" is used by the federal government and US Census Bureau. This label will only be used when directly referencing data from these groups and does not reflect the views of the authors of this paper.

gaming businesses redistribute profits to tribal members and allocate funding to community-building programs like academic enrichment or resources for elders. Many Tribal Nations have also taken extensive action to engage in their own energy efficiency programs, like the Leech Lake Band of Ojibwe in Minnesota², who are leaders in sustainability in the Midwest.

It is essential to provide comprehensive energy efficiency resources and funding to Indigenous groups. Native American households have an average energy burden (the percentage of gross household income spent on energy costs) that is 45% higher than non-Hispanic white households (Drehobl, Ross, and Ayala 2020). Figure 1 illustrates the disproportionate percentage of Native American households with high energy burden in relation to overall population size.

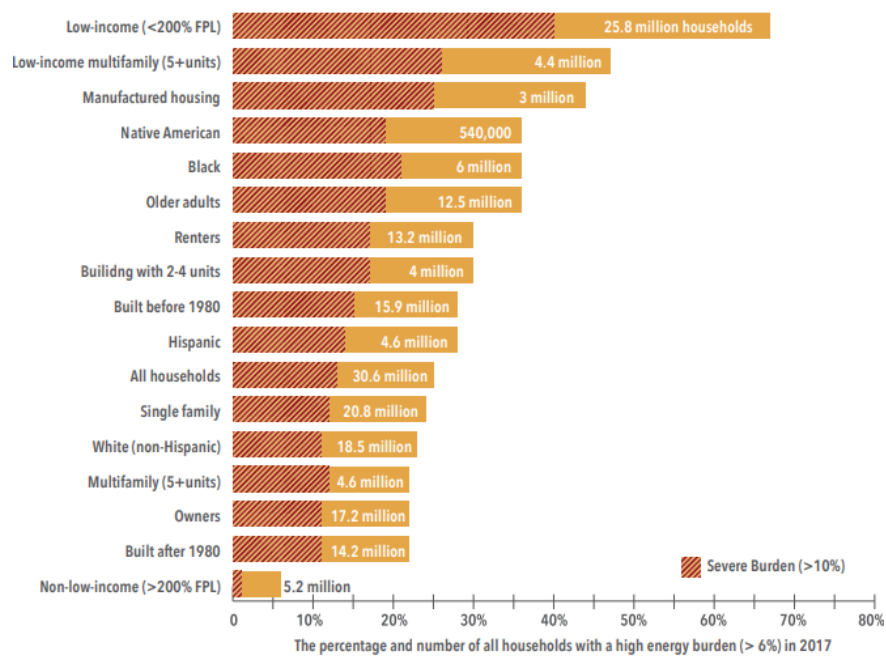


Figure 1. U.S. households with a high energy burden (>6%) across subgroups, 2017
Source: Drehobl, Ross, and Ayala 2020.

The data in this report reflects all those who have identified themselves as Native American or Alaska Native on the U.S. Census, not solely those living on reservations. This makes it clear that specific support is necessary for reservations, but also Indigenous people who do not reside on tribal lands, which include reservations³ and off reservation land trust areas⁴. Based on a 2014 report by the U.S. Department of Housing

² This paper uses state names and boundaries drawn by the U.S. government. The authors of this paper acknowledge that these boundaries are not representative of the Indigenous stewardship of these lands. This paper was written on the occupied lands of the Three Fires Confederacy: Ojibwe, Odawa and Potawatomi; and the Myaamia, Ho-Chunk and Menominee peoples.

³ Reservations are areas of land that have been set aside by the United States government either through a treaty or an official act of Congress and are governed by a federally recognized tribe.

⁴ The U.S. Census Bureau defines off reservation land trusts as areas for which the United States holds title in trust for the benefit of a tribe or for an individual American Indian that can be alienated or encumbered only by the owner with the approval of the Secretary of the Interior or his/her authorized representative (U.S. Census Bureau 2021).

and Urban Development (HUD), 35% of the Indigenous population lives in metropolitan areas, which HUD defines as areas in counties without tribal lands or high Indigenous populations (Pettit 2014).

The creation of reservations was an act of racial oppression by the federal government, which used its power to confine Indigenous people to certain lands. Over time the purpose of reservations has shifted to land preservation for Indigenous groups, with stated obligations including housing and education (Whitegull 2021). While there is land reserved for hundreds of Tribal Nations across the United States, it is held in trust by the federal government, which prevents the Indigenous people who reside on these lands from reaping the full benefits of ownership (Riley 2016). The land is either leased or set as an allotted trust for 50 years to the individual (HUD 2020). Preventing Indigenous peoples from owning their own land makes the housing market on reservations complicated and puts these communities at a disadvantage in gaining community and generational wealth.

There are also systemic challenges for tribal communities, especially when there are uniquely complex utility structures. Since reservations are typically in rural areas, they are mainly served by rural electric cooperatives or small municipal utilities. Cooperative and municipal utilities are typically unregulated by state public service commissions, and, depending on the state, may be exempt from energy efficiency mandates. For example, in Michigan, the energy efficiency resource standard that governed municipal and cooperative utilities sunset at the end of 2021. This means large swathes of the state, including reservations, are served by utilities that are no longer required to offer energy efficiency programming. This prevents tribal communities, and other rural communities, from reaping the immense benefits of these programs.

To further complicate the picture, there are instances where the land areas of individual tribes are serviced by multiple utilities. For example, the Leech Lake Band of Ojibwe reservation in Minnesota overlaps with territories of six different electric utilities: Lake County Power, North Itasca Electric Coop, Beltrami Electric Coop, Minnesota Power Co., Crow Wing Coop Power & Light, and Otter Tail Power Co. (MPUC GIO 2021). This means that different parts of the reservation experience different quality of utility service. One area of a reservation may be served by a utility that offers energy efficiency programming, allowing residents to access rebates, energy audits and even different rate structures, while other parts lack this access. This is an issue of equity, but it also makes it difficult, if not impossible, for tribal leaders to have a unified message and strategy for improving the efficiency of housing stock. These factors effectively prevent tribes from having the autonomy other local governments have over energy efficiency programs.

The unique set of systemic challenges that tribal communities face demonstrates the need for tailored funding and programming to uplift these communities and provide them with the energy efficiency benefits of programs designed for other communities.

The Benefits of Building Energy Efficiency

Improving the energy efficiency of buildings has tremendous environmental benefits and is a critical component to any utility, state or tribe's decarbonization goals. Energy efficiency reduces overall consumption and lowers energy demand. Reducing consumption directly leads to meaningful emissions reductions of particulate matter, nitrogen oxide, sulfur dioxide and carbon dioxide. Several Midwestern states with decarbonization goals also have reservations within their borders such as Michigan, Minnesota and Wisconsin. In order to meet these goals, states cannot afford to ignore the decarbonization of buildings on tribal lands. Utilities and state governments should work with tribal governments to ensure they are effectively supporting tribal efforts to help reach their individual and collective decarbonization goals.

Efficient buildings are also safer and healthier for the building occupants. Poorly insulated buildings can be drafty and damp, which can directly contribute to the increased occurrence or severity of asthma attacks, colds and allergies. These conditions can make it more challenging to work and study, leading to decreased productivity and mental health. Improving building efficiency can create safer, healthier and more comfortable homes, all of which are benefits that tribal communities deserve. Additionally, energy efficiency can also help strengthen the resilience of buildings and communities, which will increase in importance as climate change intensifies.

Midwest Context

As Table 1 illustrates, there are nearly 980,000 people who identify as Native American or Alaska Native living both on and off reservations across 13 Midwestern states (World Population Review 2022). In sheer numbers, Michigan has the highest Indigenous population in the Midwest with around 147,000 people identifying as Native American or Alaska Native, while Iowa ranks the lowest with about 27,000 people. However, as a percentage of the overall state population, South Dakota ranks the highest, with approximately 10% identifying as Native American or Alaska Native. In both Kentucky and Indiana, this value is approximately 0.7%, the lowest in the region.

Nine Midwestern states⁵ contain a total of 60 federally recognized tribal reservations and/or off reservation land trust areas. These states are Indiana⁶, Iowa, Kansas, Michigan, Minnesota, Nebraska, North Dakota, South Dakota and Wisconsin. Illinois, Kentucky, Missouri and Ohio do not have federally recognized tribal lands. According to data available from the U.S. Census 2016-2020 American Community Survey 5-Year Estimates, there are approximately 230,000 Indigenous people living on federally recognized tribal lands within the boundaries of the defined eight states, approximately

⁵ The U.S. Census Bureau does not report state-level data on Indigenous populations, but rather by tribes and their respective land boundaries. In some cases, these boundaries extend into multiple states. For the purpose of this report and to remain consistent with other references, data for tribes was attributed to the state that contains the largest land area of the designated tribal lands. Slight discrepancies in numbers are possible and acknowledged.

⁶ Although Indiana does have federally recognized tribal land for the Pokagon Band of Potawatomi, relevant population data was not available, and therefore was excluded from further analyses for the purposes of this paper.

25% of the region's Indigenous population (U.S. Census Bureau 2021). Through analysis of each state's breakdown as shown in Table 1, North Dakota has the highest percentage of on tribal land population at about 81%. At the low end, only 4% of Iowa's Indigenous population lives on tribal lands.

Table 1. Midwest Native American or Alaska Native-identifying population by state

State	Native American or Alaska Native identifying population count	Percentage of state population that identifies as Native American or Alaska Native	Native American or Alaska Native identifying population living on tribal land count	Percentage of state's Native American or Alaska Native identifying population living on tribal land
Michigan	147,844	1.48%	36,507	24.69%
Minnesota	108,322	1.89%	39,085	36.08%
Ohio*	101,157	0.86%		
Illinois*	101,063	0.81%		
Wisconsin	92,283	1.57%	41,661	45.14%
South Dakota	90,422	10.02%	55,908	61.83%
Missouri*	81,120	1.31%		
Kansas	61,423	2.10%	6,061	9.87%
Indiana**	52,429	0.77%		
North Dakota	50,119	6.48%	40,579	80.97%
Kentucky*	33,033	0.74%		
Nebraska	32,827	1.67%	8,828	26.89%
Iowa	27,712	0.87%	1,112	4.01%
Total	979,754		229,741	

* Indicates state without federally recognized tribal reservations and/or off reservation land trust areas.

** Indiana was excluded from analysis due to lack of relevant data. See footnote 6. Source: World Population Review, *Native American Population 2022*, 2022 and U.S. Census Bureau, *2016-20 American Community Survey Estimates*, October 8, 2021.

To deepen the understanding of the disproportionate number of energy burdened Native American households, data available from the U.S. Department of Energy Efficiency and Renewable Energy Low-Income Energy Affordability Data (LEAD) Tool was obtained and analyzed to define state level percentages of the average energy burden of those who are living on federally designated tribal land areas. State level percentages of tribal household energy burden were analyzed to make a clearer comparison to overall state average energy burden that includes non-tribal lands, not to conflate or minimize the unique challenges faced by individual reservations.

The LEAD tool reports data for each tribe, so percentages were weighted and adjusted for state Native American or Alaska Native identifying population accordingly. In every state studied, the average energy burden for Indigenous people living on tribal land is

higher than the corresponding overall average statewide energy burden percentage, as demonstrated in Table 2. The discrepancies are greatest in Minnesota and South Dakota, where the average energy burden for Indigenous population on tribal lands is 194.50% and 83.67% higher than that of the general state population, respectively. This comparison illustrates the marginalization of Indigenous groups and demonstrates the case for targeted programmatic efficiency efforts.

Table 2. Average energy burden by state and tribal lands within state boundaries

State	State average energy burden (% income)	Tribal lands in state boundary weighted average energy burden (% income)	Percentage increase between energy burden on tribal lands and state average
Iowa	3.00%	5.00%	66.67%
Kansas	3.00%	4.98%	66.00%
Michigan	3.00%	4.14%	38.00%
Minnesota	2.00%	5.89%	194.50%
Nebraska	3.00%	4.12%	37.33%
North Dakota	3.00%	4.81%	60.33%
South Dakota	3.00%	5.51%	83.67%
Wisconsin	3.00%	3.12%	4.00%

State average energy burdens are reported in rounded whole numbers by the LEAD Tool. Individual tribal lands energy burdens are calculated weighted averages using population data from the U.S. Census Bureau, giving more granular numbers. Source: U.S. Office of Energy Efficiency and Renewable Energy, *Low-Income Energy Affordability Data Tool*, April 2020 and U.S. Census Bureau, *2016-20 American Community Survey Estimates*, October 8, 2021.

Case Studies: Types of Funding and Past Recipients

U.S. Department of Housing and Urban Development: Native American Housing Assistance and Self Determination Act of 1996 and Indian Community Development Block Grants

The Native American Housing Assistance and Self Determination Act of 1996 (NAHASDA) is implemented through HUD. With NAHASDA, HUD authorized two programs for federally recognized tribes across the United States (HUD 2021b). The two programs are the Indian Housing Block Grant, which are direct grants to tribes, and the Title VI Loan Guarantee that allow tribes or tribally designated housing entities to leverage the Indian Housing Block Grant funding by pledging it to HUD to provide a guarantee to the lender (HUD 2021b; HUD, n.d. b). These programs are exclusively for low-income people or affordable housing projects on reservations and must be allocated to a recognized tribal entity with the proven capacity to implement housing programs (HUD 2021b). In addition to NAHASDA, HUD administers Indian Community Development Block Grants (ICDBGs) which can cover projects like infrastructure construction and housing rehabilitation (HUD, n.d. a). These are meant to serve the low-income community on reservations with similar eligibility requirements, including that

applicants must have an established relationship with the federal government (HUD, n.d. a).

While many federally recognized tribes receive this funding, the Ho-Chunk Nation offers a good example of how tribes have successfully utilized NAHASDA and ICDBG funding. The Ho-Chunk Nation is a tribal group whose ancestral history stretches across many states in the Midwest region; however, their federally recognized reservation is in Western Wisconsin (Whitegull 2021). The Ho-Chunk Nation is one of many nations leading the way in community housing initiatives. Tribal governments were specifically established to interact with federal, state and local governments, since this formal structure is an eligibility requirement for most funding opportunities (Ho-Chunk Nation 2022). The Ho-Chunk Housing and Community Development Agency (HHCDA) is a tribally designated housing entity that stemmed from this formal establishment and oversees and implements all housing initiatives on the reservation.

The main goal of HHCDA is to provide quality affordable housing that meets the needs of the Ho-Chunk community and leads to self-sufficiency (HHCDA 2020). NAHASDA's Indian Housing Block Grants fund most of the agency's programs, like weatherization, rental housing maintenance and housing development. However, HHCDA also uses ICDBGs for water and sewer infrastructure and new construction of community buildings (HHCDA 2020). They have stretched the impact of federal dollars by combining ICDBG funding with NAHASDA Title VI Loan Guarantee programs. In 2005, the agency developed 36 new affordable rental units, one of the first multimillion-dollar NAHASDA Loan Guarantee programs. They received an ICDBG to fund the infrastructure for those units (HHCDA 2020). This commitment to maximizing the resources available to them demonstrates the fortitude of the Ho-Chunk Nation and marks them as leaders in housing.

HHCDA has made considerable progress in developing affordable housing on their reservation, even winning a HUD Office of Native American Programs Award "For Outstanding Contribution in the Area of Sustainability" (HHCDA 2020). However, they still experience frustrations with how funding is structured. One of the stated guiding principles of NAHASDA is allowing communities to "prosper without government involvement in their day-to-day activities" ("Native American Housing Activities" 2022). However, when all federal funding for Native American housing is aimed towards low-income people, this presents the assumption that Native Americans will always be low-income (Whitegull 2021). When a Tribal Nation accesses federal funding to develop affordable housing on their reservation, only tribal residents who qualify under the affordable housing income bracket can live there.

If an individual no longer qualifies for affordable housing on their reservation, there are limited options to rent or buy their own homes. This so-called "missing middle" phenomenon—where prospective homeowners are too wealthy to qualify for subsidized housing but find the remaining housing stock too expensive for their income level—is not an issue that only affects Indigenous people. However, the problem is exacerbated on reservations, with limited housing stock and structural disincentives to buying or building houses on the reservation. As previously discussed, reservation land is

not owned by the tribe, but instead is held in trust by the federal government. If an Indigenous person is debating where to buy a home, looking on reservation would mean dealing with complex laws regarding home ownership, scant opportunity for price appreciation and limited utility efficiency programming. Whereas on non-tribal land, Indigenous people would have additional financing options, a dynamic real estate market and access to utility programs. Although there are many factors that influence where a person chooses to live, those that make living on a reservation quite difficult may persuade someone to live off-reservation instead.

While the various HUD financing options have allowed Tribal Nations like the Ho-Chunk to develop quality affordable housing for their low-income communities, there are still many long-term housing challenges on reservations that are not addressed through this funding.

Tribal Energy Efficiency and Conservation Block Grant Program

The Energy Efficiency and Conservation Block Grant Program (EECBG) was a one-time initiative that was part of the Energy Independence and Security Act of 2007. The goal of the program was to assist governments, tribal included, in implementing strategies to improve energy efficiency in a variety of sectors, including buildings (Cross 2011). The program received appropriations from the American Recovery and Reinvestment Act of 2009 and was launched by the Department of Energy (DOE) in the same year (Cross 2011). \$28 million of the EECBG award was spent on 421 tribal communities across the United States. The EECBG was a formula grant, which means the allocation amount to specific groups was dependent on the population size measured through the census. One complication with this is that the census consistently undercounts Indigenous people (Lo Wang 2022). Therefore, allocation determinants may not be entirely accurate and could lead to underfunding of Tribal Nations.

Grant money received from EECBG primarily went toward internal tribal resources, with 112 audits and 235 retrofit projects. In addition, 144 tribes developed plans to educate residents about the current and future state of energy in their communities, with the hope that this education would ensure any programs developed would continue past the grant period. The EECBG programs and initiatives ran between 2009 and 2015 with over 100 being completed by 2011 and the rest to conclude in the following years (DNV GL 2015; Cross 2011).

With the third highest state population of Indigenous Americans in the country (ICT 2021), a large portion of the recipients of the Block Grants were in South Dakota. The Oglala Sioux Tribe's Pine Ridge Reservation is in the southwestern corner of South Dakota and covers 2.8 million acres of land (about the size of Connecticut) with over 45,000 enrolled citizens (Bear Runner 2019). The Oglala Sioux Tribe received over \$827,000 in tribal EECBG funding for their projects (Cross 2011). The allocation of this funding was overseen by the Oglala Sioux Tribe Renewable Energy Development Authority and was mostly used for the development of an energy efficiency and conservation strategy for the Tribe. This included training programs to teach 15 Oglala Tribe members how to be energy auditors and retrofitters, as well as outreach for weatherization financial assistance (Cross 2011).

While the Block Grant was impactful in developing strategies to address these energy efficiency gaps and train some tribal members to complete audits, the impact has faded over time without consistent funding to implement the improvement measures recommended by the audits, thus continuing the legacy of substandard buildings on the reservation. Written testimony from Oglala Sioux Tribal leaders in 2018 and 2019 stated that numerous homes needed repairs and were overcrowded. In addition, the testimony stated that the Nation's aging school infrastructure was inadequate and needed a complete overhaul. These subpar building conditions are things the Tribe had hoped to address through past federal funding (Bear Runner 2019). However, the one-time nature of the EECBG funding proved insufficient in the long term on the Pine Ridge Reservation, as well as for other recipients. The program did demonstrate that when given proper resources, tribes are able to implement and prioritize energy efficiency programs. However, a consistent long-term funding stream is essential for effective progress.

Successful Synergy of Federal and State Funding in Minnesota

The Leech Lake Band of Ojibwe is a member of the greater Ojibwe or Anishinaabe Nation, which is the second largest in North America, and has become a sustainability leader among Tribal Nations in Minnesota (MIAC 2021). The 865,000-acre Leech Lake Reservation is located in north-central Minnesota and has over 10,000 tribal members (Toft 2019). The Band has a long history of pursuing sustainability projects, particularly related to energy, and is a prime example of the impact of combined funding sources for tribal groups.

One recent energy project by the Band that utilized diverse funding sources was completed with the help of a \$79,091 grant from the U.S. Department of Energy's Office of Indian Energy Policy and Programs. The Band performed investment-grade audits on 22 tribal government buildings, beginning in August 2017. The audits were completed by July 2018 (DOE 2018). The project's goal was to "identify energy conservation measures to increase energy efficiency" in the Band's worst performing government buildings (Toft 2019). In addition, DOE's grant allowed the Band to draft and print a Sustainability Energy Portfolio. According to the project's final report, the investment-grade audit put them on a path to install technology that would reduce energy demand and increase energy efficiency, enhance comfort for the building's occupants, increase equipment functionality, and decrease overall maintenance. In addition, the audit found a potential of 2,728,278 kWh per year in energy savings, over \$276,000 in annual savings, and major reduction in carbon and greenhouse gas emissions from the 22 buildings (Toft 2019).

The Investment Grade Audit Project also received assistance from the state of Minnesota's Guaranteed Energy Savings Program (GESP), showing how federal and state programs can successfully work together to achieve sustainability goals. One large barrier to undertaking energy efficiency projects and other sustainability efforts is a lack of expertise in energy. This is where GESP proved to be especially valuable to the Band, who did not have the staff with building science expertise or time to evaluate auditor proposals and make sure the needed information would be provided in an easily digestible manner. Through GESP, the State of Minnesota provided a third-party

review of audit contracts and other paperwork that ensured a successful outcome. This example of collaboration and combined funding that allowed the Band to lead the project demonstrates how programs can support the success of energy work on Tribal Nations without taking over.

The Leech Lake Band of Ojibwe is also a participant in the Minnesota GreenStep Reservation Program, a voluntary challenge where tribes receive assistance and recognition for completing sustainability goals. Since joining in 2014, the Band has taken many actions to improve sustainability, notably a dark sky and energy efficient outdoor lighting requirement for new construction on tribal lands (Minnesota GreenStep Cities 2022). Through this program, the Band also installed the U.S.'s "first community solar garden in an Indian Nation," proving their commitment not only to energy efficiency but the production of renewable energy and creation of local community food systems (Minnesota GreenStep Cities 2022).

The many successful projects led by the Leech Lake Band of Ojibwe show how federal and state funding can be combined to achieve impactful results. In addition, voluntary programs like Minnesota GreenStep that are geared specifically toward tribes and reservations can have an additional positive impact on groups committed to sustainability work. While the Leech Lake Band of Ojibwe has had success with utilizing federal and state energy funding, not all tribes have the capacity, expertise, or bandwidth to pursue these funding opportunities. For more tribes to see similar success, federal funds must become more accessible, be awarded in larger amounts to more tribes, and actively seek to complement state and local opportunities.

A New Wave of Funding and Initiatives

The Biden-Harris Administration has shown a commitment to advancing environmental justice through comprehensive initiatives that prioritize communities. Among these efforts is the Justice40 Initiative. The Justice40 Initiative is the collaborative government effort to ensure at least 40% of federal investments in climate and clean energy go toward disadvantaged communities.

In the language for Justice40, the inclusion of Indigenous communities is limited to geographic areas within tribal jurisdictions (Young, Mallory, McCarthy 2021). Certain tribes are federally recognized but do not have reservations and consequently, do not have tribal jurisdiction. Therefore, this language instantly excludes many federally recognized tribes and non-recognized Indigenous peoples (IEN 2021). Another specification in the guidance comes in the definition of what constitutes a benefit, which explicitly states stakeholder consultation will occur and include the engagement of tribal governments and Indigenous communities. This expressed prioritization of tribal engagement is an important step towards more equitable policies, however, there is concern regarding the lack of clarity with how the 576 federally recognized tribes will be engaged. The lack of defined engagement standards may create potential harmful delays or barriers to investments in the Tribal Nations who fit the narrow definition (IEN 2021). As shown with the Leech Lake Band of Ojibwe, when tribal communities lead sustainability and energy projects, the results can be better than with an externally led

approach. Success stories like this are evidence of the value of directly coordinating with tribal groups and should continue to occur with any decision-making processes that are intended to benefit their communities. The written goal of direct tribal engagement in Justice40 is valuable, but since there are no explicit targets in the guidance, it will be important to track the actual progress of this engagement with tribal communities to measure its success.

Another new initiative that includes Indigenous communities is HUD's Climate Action Plan, published in November of 2021. The goals of this plan begin with a Climate Risk Assessment which will collect updated and accurate building data across all HUD programs to learn about the current climate risks and concerns in these areas (HUD 2021a). This data should help inform strategies to address climate impacts and better serve tribes and other historically excluded groups. The new Climate Action Plan includes energy efficiency initiatives, with a goal of awarding funds to tribes for efficiency retrofits starting in fiscal year 2022. The climate plan does not state the funding level for this goal or how funds will be distributed, but it clarifies that HUD's Office of Public and Indian Housing will oversee this component.

In addition to these general goals, the plan explicitly addresses the unique context that informs the political relationship between tribes and the federal government (HUD 2021a). The historical barriers to achieving climate resilience placed on tribal communities is acknowledged and the commitment to aiding tribal communities in achieving "safe, resilient housing and infrastructure through improved access to data, technical support, and funding opportunities" is expressed (HUD 2021a). These acknowledgements are followed with clear action steps that include research and capacity building within HUD to better serve tribal lands and technical assistance to support net zero building that is "reflective of tribal cultures and supports job creation" (HUD 2021a). While HUD's Climate Action Plan includes important, concrete action steps to meet their expressed goals of supporting tribal communities, there are no provisions holding HUD accountable for meeting those goals. Justice40 and the Climate Action Plan are essential first steps toward energy justice for Tribal Nations and hopefully commitment to community engagement on a federal level will continue to grow.

Recommendations

This paper has identified many funding mechanisms that currently exist in the U.S. to increase building energy efficiency for Indigenous communities. While these programs have seen some success, there are many opportunities for the U.S. government to better support Indigenous people and bolster building efficiency within tribal communities. These are not issues unique to tribal communities, but they do work to inhibit access to funding and the ability to take on energy efficiency projects. This work will be long-term, far-ranging, and complex. The following recommendations are simply a way to begin the work.

Ways to Improve Funding and Programming for Indigenous Communities

Listen to the needs of Indigenous communities and include them in the development of new programs.

This should be the foundation of all planning for Indigenous groups and any program that fails to do so will not be successful. As new initiatives are underway, government agencies are in the position to engage with indigenous communities in meaningful ways throughout the design and implementation process. Mike Troge, Environmental Project Manager with Oneida Nation states, “We would like to see if we can be part of the team to help develop programs as they are being developed rather than have these programs being developed in a black box, then distributed and tested to see if they’ll work or not.”

Simplify and streamline the application process to encourage more people to apply and allow more to benefit from funding.

One way to streamline processes could be to have one application for multiple funding sources, allowing tribes to apply more quickly and easily. In some instances, a tribe may have an idea for a clean energy project, but it may not be clear what funding that it qualifies for. Requests for Proposals (RFPs) can be restrictive, and the full scope of a project may require multiple funding streams. Jerrald Hauber, Energy Manager of the Forest County Potawatomi Community, describes an instance of utilizing four different types of funding for one project focused on energy audits. Even after being approved for the grants and establishing a designated contractor for the project, the work cannot be started until the contract is finalized, the timeline of which contends with the funding streams involved. “The grantor has said this will be finalized in the middle of July. Had this been completed by June, Focus on Energy would have funded \$15,000 per building. Changing this to September, the Focus funding is reduced to \$10,000 per building.” Working within the competing timelines of multiple grants creates unnecessary complications. Further, the time it takes to apply to several grants can be a barrier to tribal governments with limited staff. Hauber’s office has a grant writer working for them, which he notes is a “blessing” and not a given within the network of tribes.

Provide extensive outreach and communication to Indigenous communities on existing programs, new programs and deadlines.

Without clear communication about what specific types of funding is available, the information required and when the deadlines are, many communities miss out on opportunities that are meant to support them. With an influx of federal infrastructure funding, it is especially critical for the federal government to conduct targeted and clear outreach specifically to tribes.

Ensure clear and consistent communication between federal, state, local, and tribal government offices.

Depending on the RFP or funding stream, it is possible that a tribe will have to interact with the Department of Energy, the Bureau of Indian Affairs and the Department of

Housing and Urban Affairs on the federal level, in addition to state energy offices, state housing agencies, state departments of natural resources and state offices of rural affairs. While many jurisdictions may find federal bureaucracy complicated, there are even extra layers for tribes to deal with. State and federal governments need to identify the relevant points of contact within different tribal governments so important funding or commenting opportunities are not missed just because they were shared with the wrong staff member or department.

Provide funding to trusted organizations already doing work in the energy sector, in addition to or instead of creating a new program for each funding stream.

In the past, the Office of Indian Energy has pursued funding for programs or projects over organizations. Troge describes, “I question that strategy. I think if more organizations providing consultation, internal support, tribal support and connections to other tribes were scattered across the country, it seems to me it would be a great resource for tribes to learn from other tribes and gain access to funding or technical assistance opportunities and going forward would help with energy planning issues.” Establishing and supporting existing regional organizations could help mitigate some of the issues individual tribes have with capacity and funding. In the Midwest, the Midwest Tribal Energy Resources Association (MTERA) has 16 member tribes and helps to support their efforts in advancing renewable energy. More resources should be directed to organizations like this to foster and sustain institutional knowledge.

Conclusion

Currently, there are limited sources of federal funding to help Tribal Nations complete building energy efficiency projects, and therefore much that can be improved upon. Increasing the total amount of funding allocated to tribal programs, expanded funding access for all Indigenous people and not limiting it to only those who reside on reservations or qualify as low-income, and prioritizing ongoing and long-term funding over one-time awards would improve the uptake and efficacy of these programs. Additionally, funding should be more robust and accessible to all tribal entities, not only those who have the capacity and expertise to pursue sustainability initiatives. Between carbon emissions reductions, improved indoor air quality, utility bill savings and increased resiliency, energy efficiency can provide substantial environmental, health and economic benefits—benefits that Tribal Nations deserve access to. Improving the quality of the building stock on tribal lands is a meaningful way to improve the lives of tribal community members.

While federal energy programs have provided some assistance to tribes, it is not nearly enough to compensate for the United States government’s historic seizure of land and subsequent poor treatment of Indigenous people. If the government truly hopes to expand the energy efficiency of buildings for Indigenous people, they must earnestly engage with these diverse communities and provide accessible resources that completely meet their needs.

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