

ELECTRIC NATION: AN UPPER MIDWEST INTER-TRIBAL ELECTRIC VEHICLE CHARGING COMMUNITY NETWORK

The upper Midwest Inter-Tribal Electric Vehicle Charging Community Network (or “Electric Nation,” the name created by the project team to unify project partners and tribal communities) is a Native-led public-private partnership to advance electric vehicle (EV) use and reduce barriers to clean, affordable transportation in tribal communities. The tribes involved include Standing Rock Sioux Tribe, Red Lake Nation, and 21 other tribal Nations in Minnesota, North Dakota, and South Dakota. The project’s high-level objectives are to bring clean, affordable transportation options to underserved tribal communities while also testing the effectiveness of EVs on rural, cold-climate tribal lands. Community-level objectives include increasing communities’ access to essential services (e.g., medical, retail, and government), building long-lasting relationships, and reviving a sense of collaboration among the different regional tribes on clean energy and transportation. While the project is in its early stages, early findings offer some lessons learned.



Proposed EV charging network connecting 23 tribal nations in the upper Midwest through the Electric Nation project. (Courtesy of Robert Blake, Native Sun Community Power Development.)

BACKGROUND AND PROJECT OBJECTIVES

The three-year project, funded by the U.S. Department of Energy’s Vehicle Technologies Office, includes the acquisition and deployment of 16 light-duty EVs, 1 electric shuttle, and 2 school buses, as well as 60 level-2 chargers and 55 direct-current fast chargers (DCFCs). The project also includes 52 planned education, outreach, and workforce training events. Primary stakeholders include Native Sun

Community Power Development (NSCPD) and Standing Rock (“SAGE”) Renewable Energy Power Authority, in addition to the following project partners: the American Lung Association, Minnesota Center for Energy & Environment, Minnesota Pollution Control Agency, Xcel Energy, Ottetail Power, Minnesota Power, and Zef Energy.

The Electric Nation project is unique in that tribal members are the ultimate decision makers, making it a truly community-led effort. The project team, led by NSCPD and SAGE, provide technical assistance and expertise related to electric vehicles and charging, community outreach, program evaluation, and EV education. However, final decisions must be approved by tribal members.

Starting with individual tribal leaders and communities, the project team will test and demonstrate light-, medium-, and heavy-duty EVs and associated charging approaches in various settings. The project will investigate various charging network routes and local charger siting, expanding community access to essential services. The deployment of EVs and charging equipment, led by NSCPD, will provide job opportunities for local community members. Through outreach events projected to reach more than 10,000 attendees, Electric Nation aims to educate tribal communities on EVs and related infrastructure and reduce barriers to clean transportation.

COMMUNITY OUTREACH APPROACH AND GOALS

The Electric Nation leadership team is taking a community-driven approach that gives all decision-making power to the tribal communities. The project team, led by NSCPD and SAGE, will focus on outreach activities, technical training, and educational support to empower community leaders and provide information to help inform the decision-making process. During the first year of the project, a project name was created (Electric Nation) to unite the different project stakeholders and tribal communities as one team with common objectives. A logo was also developed for all subsequent project communications.

The project team will use a diverse set of outreach activities that range from participation at large regional events (including the United Tribes Technical College Tribal Leaders Summit, League of North Dakota Cities Conference, Native





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Native-led organizations responsible for overseeing the project and leading community engagement efforts because of their deep ties and strong networks in the region and amongst tribal communities. (Courtesy of Robert Blake, Native Sun Community Power Development.)

Sun Earth Day Pow Wow, Lakota Nation Invitational in South Dakota, and the Minnesota State Fair) to intimate gatherings with community leaders. Additional activities also include ride-and-drive events to allow communities to engage with vehicles in a low-stakes environment and training events for auto dealership staff, first responders, tow-truck operators, and fleet mechanics to ensure the sustainability of the vehicles and infrastructure deployed. To help build a foundation of trust and revive a sense of community felt by the regional tribes before outside interference, Electric Nation relies on two Native-led organizations (NSCPD and SAGE) with deep ties in the region to lead outreach and engagement efforts and avoid “helicopter research.”¹

Electric Nation shares information with communities through social media and NSCDP’s project landing page. The wide range of outreach activities planned allows for the project team to achieve two objectives: 1) reach, connect, and build relationships with many people to ensure that all voices are heard, and 2) build deeper connections and long-lasting relationships that will be integral to sustained future success.

Through numerous and varied outreach activities, the project team hopes to achieve the following goals:

1. Re-establish regional collaboration and sense of community through opening old trade routes between tribal areas through the deployment of an effective and reliable EV charging network.
2. Establish a baseline EV charging network and level of education about the clean transportation economy for individual communities to build upon and expand their own charging networks to best serve their residents.
3. Improve the quality of life for tribal communities through renewable energy and clean transportation deployments, which include educating the next generation of clean energy leaders, improving air quality and health, and enhancing economic opportunities.

¹ Helicopter research describes the work of higher-income scientists or engineers who enter a lower-income or disadvantaged community, perform a project or research with little or no community involvement, and create

INITIAL FINDINGS

As of this writing (June 2023), Electric Nation is one year into its three-year grant period. During the first year, primary duties included branding, hiring, contracting, strategy development, and initial outreach. For outreach activities, challenges emerged around three general themes—**program constraints, project expectations, and cultural traditions.**

Program Constraints

For most federal and state funding opportunities, the funders establish a required framework for data collection, reporting, and funding allocation. While created to ensure fairness and streamlined processes, these frameworks can constrain project teams in unforeseen ways, limiting overall benefits and successes. For example, Electric Nation’s funding agency prohibits the purchase of food for community outreach events. However, in Native culture, introductions and meetings occur over meals; it is tradition to “break bread” and get to know future project partners and/or collaborators on a personal level before working together. Funding-rule inflexibility can impede a project team’s effective engagement with the community.

Project Expectations

Funding agencies set expectations to ensure that funds are properly used and project objectives achieved. Regular progress reports, often with quantitative metrics, are usually required (e.g., quarterly, annually). However, the speed with which projects progress is highly variable depending on community types, the built environment, and the geographic region. In addition, building relationships and measuring impacts requires different approaches and time requirements that vary for different population groups. For example, community engagement will look very different (in both costs and time required) for a small neighborhood in New York City compared to tribal communities (which are sovereign nations) spread out over a three-state area, even though



Left, the Electric Nation logo was designed to create a sense of unity among the many project partners. Right, Native Sun Community Power Development will lead the installation of EV charging infrastructure for Electric Nation. (Courtesy of Robert Blake, Native Sun Community Power Development.)

outcomes such as academic papers and technical reports that do not benefit the local community. Read more in *Nature* at <https://www.nature.com/articles/s41561-022-01010-4>.

project objectives (i.e., improve public charging infrastructure) might be the same. Therefore, increased flexibility related to proposed objectives, timelines, and program evaluation are needed because outreach and relationship building takes time, and approaches vary depending on the communities involved.

Cultural Traditions

Many of Electric Nation's early successes are due to the leadership provided by the two Native-led (Native Sun and SAGE) organizations overseeing the project. Both organizations have deep ties to the region and are trusted resources; they know how to interact respectfully and honor cultural traditions. This knowledge is irreplaceable for the planning and execution of community engagement and outreach activities. Not honoring traditions, such as getting to know individuals over a meal before discussing meeting agenda items, can quickly derail tribal outreach activities and relationship building. Therefore, leveraging local community-based organizations with long histories of work in the community can help ensure effective engagement and overall project success.

RECOMMENDATIONS

While the Electric Nation project is still in its infancy, it offers several important takeaways:

- **For program designers:** Build flexibility into all aspects of the program design to ensure equity and inclusivity across a wide range of communities and population groups. Community needs, cultures, and traditions vary widely, which requires significant flexibility to ensure effective engagement and overall project success.
- **For program designers:** Work with project leaders and communities to develop an evaluation framework that is both qualitative and quantitative and be understanding of different challenges that may arise when working with different population groups. For example, Electric Nation is seeking to build deep, long-lasting relationships to revive a highly collaborative network of tribal communities last observed when old trade routes connected the communities, enabling the sharing of ideas, medicine, and more. These relationships take time and are not easily measured during a short grant period.
- **For evaluators and project teams:** Understanding community culture, traditions, and past experiences is extremely important for establishing relationships and trust for effective outreach and collaboration. The inclusion of local organizations and/or community leaders with long histories working in the area is integral to project success. Along these same lines, it is important to note there is no single approach to outreach and project design that is successful across different tribal groups.

Due to early project success, the U.S. Department of Energy's Vehicle Technologies Office awarded the project an additional \$1.67 million (May 2023) to expand regional charging infrastructure access for tribal nations based on community priorities.

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