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An Asset-Based Approach to Tribal Community Energy Planning

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An Asset-Based Approach to Tribal Community Energy Planning

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Abstract

Community energy planning is a vital component of successful energy resource development and project implementation. Planning can help tribes develop a shared vision and strategies to accomplish their energy goals. This paper explores the benefits of an asset-based approach to tribal community energy planning.

While a framework for community energy planning and federal funding already exists, some areas of difficulty in the planning cycle have been identified. This paper focuses on developing a planning framework that offsets those challenges. The asset-based framework described here takes inventory of a tribe's capital assets, such as: land capital, human capital, financial capital, and political capital. Such an analysis evaluates how being rich in a specific type of capital can offer a tribe unique advantages in implementing their energy vision. Finally, a tribal case study demonstrates the practical application of an asset-based framework.

ACKNOWLEDGMENTS

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Indigenous Collaboration
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NOMENCLATURE

ABCD	Asset-Based Community Development
BIA	Bureau of Indian Affairs
DOE	U.S. Department of Energy
DOE EECBG	Department of Energy Energy Efficiency and Conservation Block Grant
DOE IE	Department of Energy Office of Indian Energy Policy and Programs
DOE TEP	Department of Energy Tribal Energy Program
DOI	U.S. Department of the Interior
DOI IEED	Department of the Interior Office of Indian Energy and Economic Development
EMDP Grant	Energy and Mineral Development Grant
EPA	Environmental Protection Agency
FOA	Funding Opportunity Announcement
GHG Emissions	Greenhouse Gas Emissions
MEC	Mohave Electric Cooperative
M&V	Measurement and Verification
NOFA	Notices of Funding Availability
NREL	National Renewable Energy Laboratory
RUS	Rural Utility Service
SMART Goal	Specific, Measureable, Realistic, and Time-Oriented Goal
SNL	Sandia National Laboratories
START	Strategic Technical Assistance Response Team
SWOT Analysis	Strengths, Weaknesses, Opportunities, and Threats Analysis
TEDC Grant	Tribal Energy Development Capacity Grant
USDA	United States Department of Agriculture

1 INTRODUCTION

The growing concern over global warming, climate change, and greenhouse gas emissions (GHG) has pushed many government agencies to work towards a more sustainable future. The Obama Administration has made it a priority to help facilitate emerging renewable energy industries and the president recently announced the Clean Energy Savings for All Initiative, a partnership across government agencies aimed at promoting solar and energy efficiency across the United States (United States White House). The Environmental Protection Agency (EPA) also released its historic Clean Power Plan in 2015, which aims to reduce pollution from power plants. In November of 2014, the State, Local and Tribal Leaders Task Force on Climate Preparedness and Resilience submitted recommendations to the president which highlighted a need for community resilience planning to reduce "the harm and long-term costs of climate change to communities" (United States White House, "State, Local, and Tribal Leaders Task Force" 4).

Indian Nations, rich in natural resources, are uniquely positioned to further these goals (Dreveskracht 122, Kronk 454, LeBeau 38). Developing renewable energy on Native American reservations could potentially bolster local economic development, combat GHG emissions, and promote national policy. It is with these beliefs in mind that the Department of Energy Office of Indian Energy Policy and Programs (DOE IE) was created under the Energy Policy Act of 2005 (Public Law 109-58, Title V). The office was established to promote "tribal energy development, energy efficiency, and energy use for the benefit of American Indians and Alaska Natives." The office helps tribes build their internal capacities through workshops, technical assistance, funding opportunities, online trainings, and college student internships. DOE IE also works to stabilize energy costs, strengthen tribal energy and economic infrastructure, and bring electric power to the homes of tribal members living on reservations.

The DOE IE college internship program offers college students familiar with tribal issues and Native American culture the opportunity to assist in Office of Indian Energy-funded projects and gain technical skills in the field. During the internship, interns visit various sites and tribes in order to learn more about strategic energy planning and renewable energy project implementation. Interns can learn first-hand from tribal members and become aware of the current challenges tribes experience. It also allows interns to learn from the tribes' success and to understand why projects work in some instances and fail in others.

This research was developed from site visits across California and the Southwest. With 567 tribes across the United States, no two tribes are exactly alike (U.S. Department of the Interior Bureau of Indian Affairs). Each tribe has a different culture, language, and history. This quickly became evident with each site visit. For example, the Ramona Band of Cahuilla Indians were limited in terms of tribal members, but their development of eco-tourism facilities and off-grid energy systems was very impressive. On the other end of the spectrum, the Navajo Nation has more than 300,000 enrolled members and has the first established tribal utility authority (Tiller 332). Each tribe has its own strengths; for some, it may be their size or land-base and for others it may be a particularly motivated tribal member.

It also became evident that planning plays an important role in the development and implementation of energy projects. Successful implementation requires proper planning to ensure community buy-in and to establish shared energy goals. The asset-based framework is designed to support tribes throughout the planning process and to complement the strategic energy planning methods currently used by the Office of Indian Energy.

2 WHAT IS COMMUNITY ENERGY PLANNING?

Community energy planning brings different tribal stakeholders together to plan for their collective energy future. A successful plan requires the participation and support "among all segments of a tribe's society, including its elected officials, traditional leaders, spiritual leaders, youth, adults, and elders" (Department of the Interior Office of Indian Energy and Economic Development). Community-based planning offers tribal members the opportunity to help define community goals and inform the government's planning process.

Planning helps communities bridge the gap between where they are and where they want to be in five or ten years. For this reason, the planning process can benefit all tribes, regardless of size or financial status. The DOE IE relies on a nine step strategic energy planning process to help tribes develop their energy visions (see "Office of Indian Energy Strategic Energy Plan and Planning Handbook"). The nine steps are as follows:

Figure 2-1. Strategic Energy Planning Cycle, Department of Energy Office of Indian Energy.

Step 1: Identify and Convene Stakeholders – Before the planning process begins, it is necessary to identify key stakeholders who should be engaged throughout the process. This often includes: community leaders, tribal council members, facilities managers, regional intertribal organizations, local business owners, elders, and youth. Identifying and convening stakeholders is often the most time-consuming step, but it is crucial to have as many stakeholders present as possible. This ensures that different viewpoints are heard and leads to a more inclusive plan. It also increases the chances of successful project development (U.S. Department of Energy Office of Indian Energy, "Developing Tribal Energy Projects").

Step 2: Form a Leadership Team – The leadership team ensures that the process moves forward. The DOE IE recommends identifying the following leadership advocates: energy champion, plan supporter, and interdisciplinary leadership team. Ideally, the energy champion is a "highly visible, executive-level sponsor" who is enthusiastic about the process and has the ability to sustain momentum (Dane and Doris 7). The plan supporter takes on the administrative and management responsibilities of the process. The interdisciplinary leadership team should have access to funding sources, be able to make decisions, and promote the plan within their respective fields.

Step 3: Develop a Common Energy Vision – Planning is an exercise of tribal sovereignty and it can be a tool to communicate to others what social and economic values are important to the tribe (U.S. Department of the Interior Office of Indian Energy and Economic Development, "Tribal Economic Development Principles at a Glance"). The energy vision identifies the top energy priorities of the tribe and ensures that the community will support the initiatives identified by the plan-makers.

Step 4: Assess Energy Needs & Resources – Before moving forward with a strategic plan, it is necessary to take an inventory of existing conditions. The inventory helps participants understand current energy usage and estimate future energy demand. This information will also help the community determine what potential programs would most benefit the tribe. During this step a strengths, weaknesses, opportunities, and threats (SWOT) analysis may also be conducted.

Step 5: Develop Specific Energy Goals – Goals should be developed based on the community's energy vision (step 3) and energy baseline (step 4). The best kinds of goals are: specific, measurable, attainable, realistic, and time-oriented (SMART) (Dane and Doris 16). Participants should begin by identifying primary goals and then secondary goals.

Step 6: Prioritize Projects & Programs – This step identifies which strategies maximize impact using the least amount of effort. Participants should rank the effort and cost-effectiveness of each proposed project to identify and prioritize projects. Once the most cost-effective projects have been prioritized, participants can match those projects to available federal, state, local, or non-profit loan and grant programs.

Step 7: Identify Financing Options – There are many available funding sources for energy projects. Federal, state, local, and non-profit loan and grant programs will fund various types of energy projects. See Appendix A or visit the online DOE Office of Indian Energy's Energy Development Assistance tool for additional information on current financing options. In addition to direct funds, the Department of Energy and the Department of the Interior offer technical assistance to tribes. Both offices offer technical and feasibility study assistance.

Step 8: Compile the Energy Plan – This step brings all of the previous steps together. The energy plan should include the plan's objectives, goals, prioritized program options, finance options, energy baseline, and strategies for plan implementation. Implementation strategies, or implementation blueprints, should include: who will be responsible for each action item, a timeline for when each item will be completed, and what the specific deliverables will be (U.S.

Department of Energy Office of Energy Efficiency & Renewable Energy, "Guide to Community Energy Strategic Planning").

Step 9: Measurement & Verification (M&V) and Plan Alterations – Participants should discuss how to evaluate the plan and how often it should be updated. The plan should be used as a roadmap to guide projects and move the tribe closer to its energy vision. Participants should also discuss how to communicate the results of the plan back to the community (U.S. Department of Energy Office of Indian Energy, "Developing Tribal Energy Projects").

3 WHY IS COMMUNITY ENERGY PLANNING IMPORTANT?

Community energy planning is important because it helps build consensus and encourages community-based leadership. It can also be viewed as an opportunity for community members to inform local leadership about ideas or concerns they may have. Planning ensures "that issues are understood and that priorities can be agreed upon," which is a problem many communities struggle with (U.S. Department of the Interior Office of Indian Energy and Economic Development, "Tribal Economic Development Principles at a Glance Series"). The planning process can also help participants understand how problems and ideas are connected, which may help to treat systemic issues within the community.

The planning process should include participants from all segments of tribal society, especially those who have been historically marginalized or undervalued. Broad-based participation is essential for community buy-in of the plan. Participants must develop a sense of ownership over the plan so that they will become stewards of the plan's objectives after the process had ended.

In addition to the previously mentioned benefits of effective community planning and implementation, there are some additional advantages:

- Actively engaged and better informed tribal citizens,
- More energy efficient communities (Dane and Doris 1),
- Tribal energy sovereignty,
- Development of a shared vision for energy resource development,
- Regional tribal coordination and collaboration (U.S. Department of Energy Office of Indian Energy, "Developing Tribal Energy Projects"),
- Potential energy cost savings for tribal members (U.S. Department of Energy Office of Indian Energy, "Developing Tribal Energy Projects"),
- Better coordination between tribal offices and departments.

4 CURRENT FEDERAL FUNDING OPPORTUNITIES AND ASSISTANCE

Both the Department of Energy Office of Indian Energy (DOE IE) and the Department of the Interior Office of Indian Energy and Economic Development (DOI IEED) offer support to tribes looking to develop their energy resources. Funding opportunities, called Notices of Funding

Availability (NOFAs) or Funding Opportunity Announcements (FOAs), are also available throughout the year and may offer funding for specific types of projects.

4.1 Department of Energy Office of Indian Energy

The DOE IE contracts with Sandia National Laboratories (SNL) and the National Renewable Energy Laboratory (NREL) to provide support and subject matter expertise for some programs. Each lab provides technical assistance based on their strengths.

Technical Assistance

On-request technical assistance was designed to assist tribes with a specific challenge or barrier that is keeping them from successfully implementing a project. The intended result of technical assistance is a specific deliverable that can help move the project forward. Technical assistance requests may include: energy planning, climate resilience, housing and building energy efficiency, project development, village power, or assistance with policy and regulation. Research and analytic information may assist tribes with their energy planning decisions. Support may also be available for tribes that want to develop climate adaptation and resiliency plans to mitigate environmental hazards or threats. Technical assistance is administered by either SNL or NREL staff.

Strategic Technical Assistance Response Team (START) Program

Similar to on-request technical assistance, the START program provides assistance to tribes who are developing renewable energy projects. In order to receive assistance, the START program requires tribes to go through a competitive process. Unlike on-request technical assistance, the START program can provide sustained support for a longer period of time and is designed to assist tribes during the later stages of project development. SNL or NREL staff administers technical assistance.

Capacity Building

The DOE IE and NREL offer trainings on renewable energy technologies, markets, and stakeholder communication strategies. The Western Area Power Authority (WAPA) and DOE IE also co-sponsor the 2016 Tribal Clean Energy Webinar Series, which provides information to tribal leaders and staff on strategic energy planning, power marketing, clean energy, and energy independence ("2016 Webinar Series: Tribal Energy and Economic Development"). The Office of Indian Energy's website also houses an energy resource library, links to past forums, and past workshops.

Notice of Intent: First Steps Toward Developing Renewable Energy and Energy Efficiency on Tribal Lands 2016 FOA

This planned FOA was announced by the DOE IE and is expected to be issued in August or September of 2016. The FOA will "complement the technical assistance DOE IE offers by providing funding to help tribal communities develop and sustain strategic energy solutions" (Notice of intent no. DE-FOA-0001621). Specifically, the FOA will cover the following topic areas: energy option analyses; establish energy baseline energy use and efficiency options; develop energy organizations; conduct climate resiliency planning; establish policy, regulations,

and codes to reduce energy use or promote energy development; and obtain skills and training related to energy use and development (Notice of intent no. DE-FOA-0001621).

4.2 Department of the Interior Office of Indian Energy and Economic Development (DOI IEED)

DOI IEED has a unique trust relationship with tribes, similar to that of the Bureau of Indian Affairs (BIA). For this reason, processes for grant applications and Notices of Funding Availability (NOFAs) differ slightly from DOE IE protocols. Technical assistance through DOI IEED is provided by in-house staff with expertise in mineral/energy development and tribal economic development.

Energy and Mineral Development Program Grant (EMDP)

This grant allows tribes to evaluate their energy and mineral resource potential on their lands. This includes both renewable and conventional energy sources. Activities covered under this grant include: performing market analyses, initial exploration of resources, economic evaluation of resources, and defining potential targets for development (U.S. Department of the Interior Bureau of Indian Affairs).

Tribal Energy Development Capacity Grant (TEDC)

Offered through the Division of Energy and Mineral Development (DEMD), this grant assists tribes in developing or enhancing their regulatory environment for energy resource development (U.S. Department of the Interior Bureau of Indian Affairs). This can include activities such as: establishing a tribal utility authority, establishing tribally chartered corporations, or developing codes related to regulating energy resources.

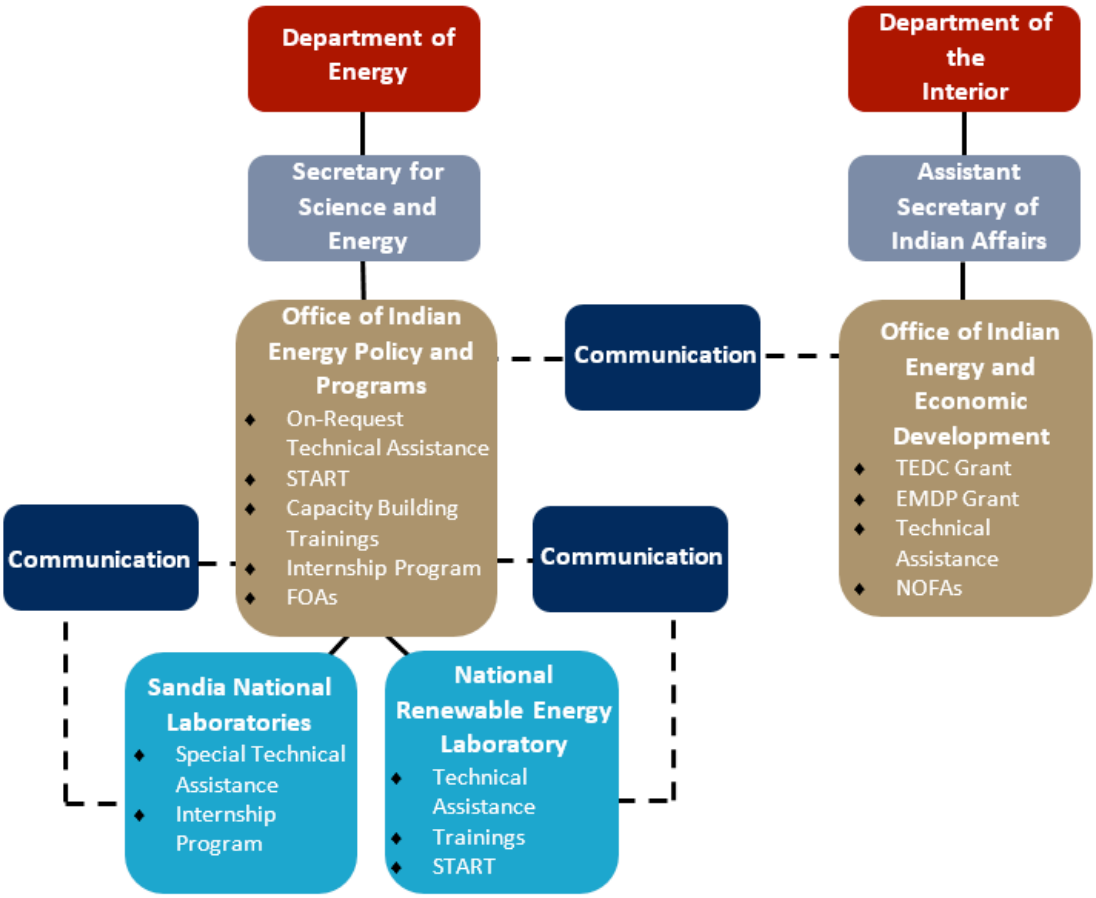

Figure 4-1. Government Agency Flowchart, energy.gov and bia.gov.

5 ASSET-BASED COMMUNITY ENERGY PLANNING FRAMEWORK

There are two major approaches to planning. The first is a needs-based, top-down approach which concentrates on a community's deficiencies and challenges. The second is an asset-based, bottom-up approach which focuses on a community's inherent gifts and strengths. The asset-based approach was pioneered by John Kretzmann and John McKnight in the early 1990s and was called asset-based community development (ABCD).

ABCD planning was ground-breaking because it was the complete opposite of traditional needs-based planning. Needs-based planning creates a dependent relationship between a historically marginalized community and outside organizations and institutions. Under a needs-based approach, residents of these communities "come to believe that their well-being depends upon being a client" and as such they feel that their "needs can only be met by outsiders" (Kretzmann and McKnight 2). Additionally, residents become reduced to consumers of outside handouts, funds, or assistance and lose incentives to become producers of solutions to their own challenges. Historically marginalized groups begin to "think of themselves and their neighbors as fundamentally deficient, victims incapable of taking charge of their lives" and their future

(Kretzmann and McKnight 4). Unfortunately, this cycle of dependency is a reality on many Native American reservations across the United States.

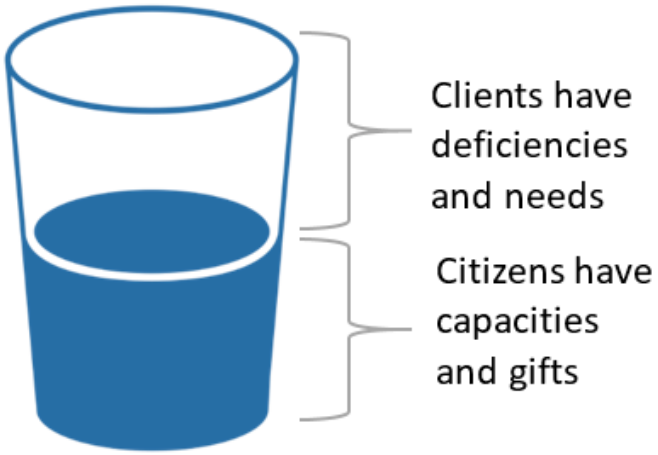

Figure 5-1. Two Approaches to Planning (Kretzmann and McKnight 13).

The Hopi tribe found themselves in a similar cycle of dependency before they took control of their energy future. The tribe executed their energy vision by establishing the Hopi Foundation and NativeSUN, the foundation's solar micro enterprise. The former associate director explained why they took an asset-based approach to community development, stating "when you focus on deficiencies of people, then the perception is that the people are weak and that they're unable to do things for their own conditions…. [the Hopi Foundation/NativeSUN's] approach is that the strengths are inherent in communities" (LaDuke 189). The tribe made a conscious choice to use less energy, produce what they could through photovoltaic solar panels, and be cognizant of how their energy use decisions may affect other tribal members (LaDuke 189). Most of the solar panels were installed by Debby Tewa, also known as "Solar Debby," who believes that that solar power maintains Hopi self-sufficiency (LaDuke 188). What makes these solar installations unique is that they are culturally-driven. There are no standard system sizes; each installation is customized to fit the customer's energy needs.

5.1 Community Capital Planning Framework

The asset-based approach, referred to here as community capital planning framework, takes an inventory of the different types of capital assets available to a tribe. This includes assets that are commonly overlooked such as: human capital, financial capital, geographic capital, and political capital (see Figure 5-2). Once a tribe fully understands their strengths, they can make more informed energy development decisions as was illustrated in the Hopi example. Each type of capital is valuable and should be leveraged to assist tribes throughout the strategic energy process.

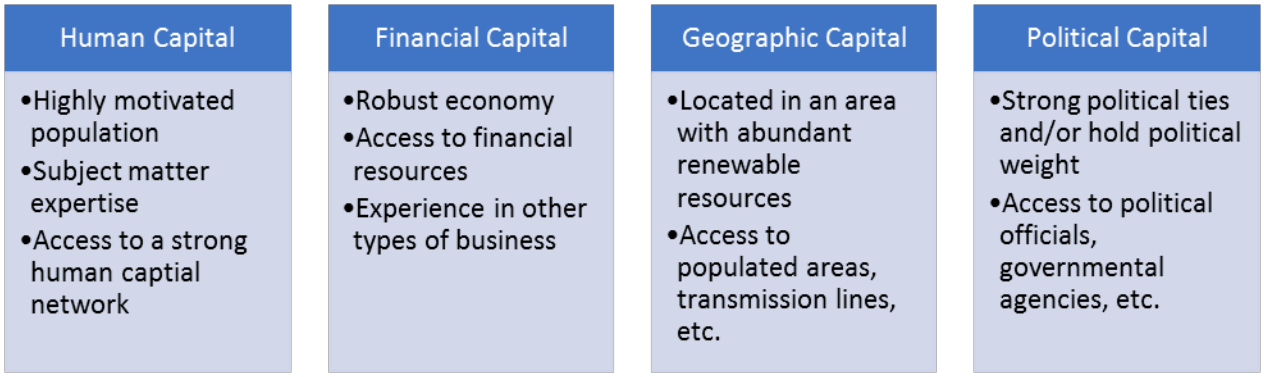

Figure 5-2. Types of Community Capital.

Each of these categories offers tribes unique advantages for their energy resource development projects (see Figure 5-3). For example, a tribe with a large amount of human capital—but limited financial and geographic capital—can still develop a very successful project. This is similar to the Ramona Band of Cahuilla Indians (Ramona Band). With limited revenue and an even more limited tribal member enrollment, the Ramona Band was still able to develop an off-grid solar array and eco-tourism facility. The Ramona Band leveraged their highly motivated staff to locate resources and technical assistance. Once they learned that transmission lines and grid connectivity weren't feasible, they proceeded to build entirely off-grid and used it to their advantage. A large selling point of their eco-tourism facility is that the facility has an extremely small carbon footprint and is completely off-grid.

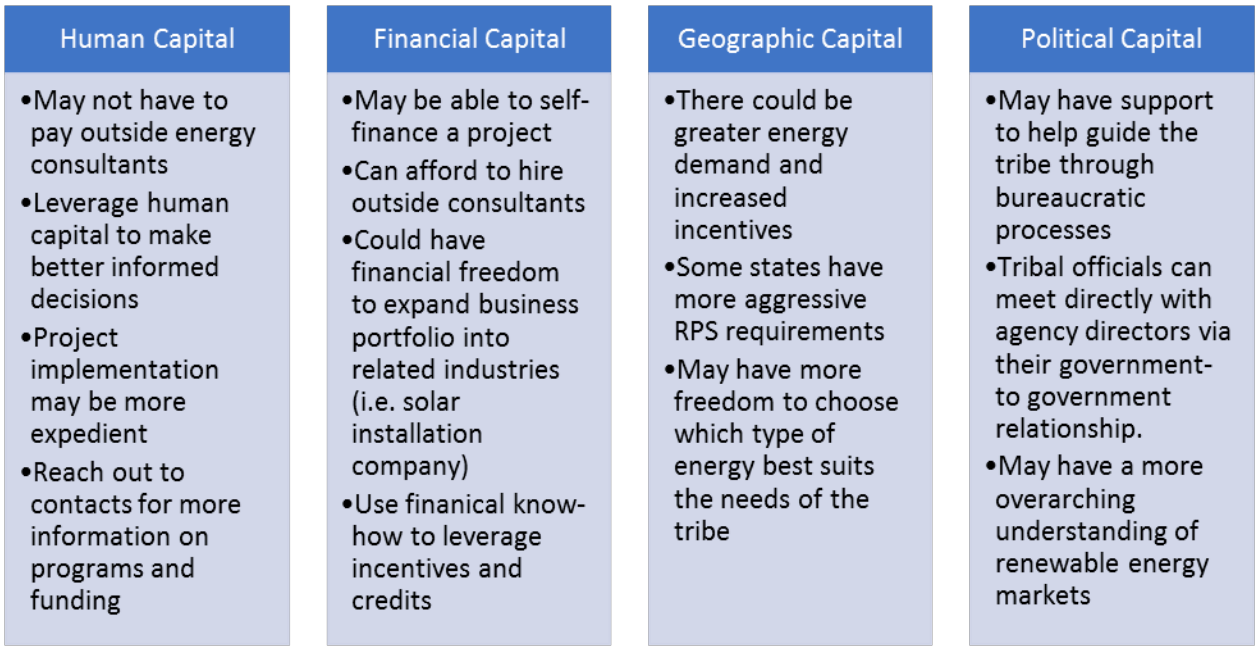

Figure 5-3. Unique Potentials within Each Type of Capital.

6 HOW AN ABCD APPROACH CAN COMPLEMENT COMMUNITY STRATEGIC ENERGY PLANNING

An ABCD approach, similar to the strategic energy planning process used by the DOE IE, assists tribes in realizing their potentials. The DOE IE maintains that the planning process must be internally driven and the plan must be developed by tribal members, for tribal members. A recent study conducted by the University of North Carolina at Chapel Hill found that the assistance offered from federal agencies, such as the DOE IE, was key to developing the capacity of tribes interested in pursuing energy resource development and planning (Brookshire 1514). In fact, tribes with energy resource plans are more likely to take a "comprehensive and sustainable approach to energy resource development" than tribes who do not have a plan in place (Brookshire 1514). The technical assistance tribes received through Federal agencies such as the DOI IE and DOI IEED to begin their plans is invaluable; however, plan implementation remains up to the tribe itself.

An analysis of the nine-step planning process identified some areas of improvement within the cycle. On-request technical assistance tends to assist tribes with steps one through four in the planning cycle. Resources and funding opportunities assist tribes with navigating steps seven through nine in the planning process. However, tribes may have difficulty overcoming step five (develop specific goals) and step six (prioritize projects & programs) in the planning cycle.[1] The ABCD framework may prove to be the most useful for tribes during steps five and six. Identifying community assets gives tribes another perspective on potential projects and may help tribes to develop their specific energy goals.

When developing specific goals (step 5), the framework could help tribes determine how their current community capital assets play a role in helping them achieve their goals, thereby allowing the tribe to utilize their strengths efficiently. The Hopi Tribe's ABCD approach revealed that the tribe had geographic capital in the form of sunlight and human capital in the form of a subject matter expertise (Debby). As such, the Hopi Tribe was able to leverage their strengths to achieve their goal: energy self-sufficiency.

When prioritizing projects and programs (step 6), the framework can help tribes leverage their capital assets and identify available program funding. Step six includes identifying which strategies will have the greatest impact using the least amount of effort. Once a tribe understands their community capital assets, they can better identify easily achievable strategies that play to their strengths. Once projects are prioritized, they can be compared to available programs and FOAs.

[1] Tribes may apply for project-specific energy planning assistance through NREL; however, planning assistance is most helpful when a tribe has specific energy goals in place (step 5), a clear energy vision (step 3), and an idea of what types of projects they would like to pursue (step 6).

7 APPLYING THE FRAMEWORK: HUALAPAI CASE STUDY

For this report, the Hualapai Tribe was chosen as a case study due to their established and well-documented energy planning history and their rich diversity of community capital. Interns visited the site and met with the planning and economic development director, Kevin Davidson. Data was gathered through first-hand observations and past presentations created by Kevin Davidson.

7.1 Background

7.1.1 Tribal Demographics

The Hualapai people, or people of the tall pines, reside in Northwestern Arizona bordering the Colorado River and the Grand Canyon. The Hualapai reservation is over one million acres in size and contains 108 miles of river front (Knott and Davidson 4). There were 2,339 enrolled members as of March 2016 (Davidson 2). The establishment of tribal enterprises such as Grand Canyon West and Hualapai River Runners greatly grew the tribe's economy. Established in 1973, Hualapai River Runners takes visitors on a one-day white water rafting excursion below the rim of the Grand Canyon (Davidson 11). The tribe also holds a 9,000-acre lease at Grand Canyon West for the purposes of pursuing economic development (Davidson 13). The main attraction at Grand Canyon West is the SkyWalk, a glass bottom bridge that allows visitors to walk out over the edge of the Grand Canyon. Today, the tribe's half dozen enterprises employ 788 full and part-time employees (Davidson 7). The tribe is governed by an executive and judicial branch. The executive branch is comprised of a nine-member tribal council that oversees 12 administrative departments (Hualapai Tribe). The judicial branch oversees tribal court and the court of appeals.

7.1.2 Hualapai Energy Resource Development

The tribe has applied for and received a number of energy resource development grants from numerous government agencies (see Table 7-1). The tribe has been looking to develop their energy resources since the early 2000s and has explored their wind, biomass, and solar potentials. For cultural reasons, the tribe decided that solar energy best fit their needs and values. In 2009, the tribe implemented their first solar project, a ground-mounted south facing solar array at their juvenile detention center (Davidson 5). The tribe installed another solar project on the roof of their elementary school in 2011 (Knott and Davidson 5). This allowed the tribe to gain experience developing small-scale renewable energy projects.

Table 7-1. Hualapai Energy Grant Timeline (2002 – 2014), Knott and Davidson PowerPoint Presentation, March 2015.

Year	Agency	Grant
2002	DOE	Native American Anemometer Loan Program - 20-meter MET Tower at radio tower site
2003	DOI	EMDP - Renewable Energy Feasibility Study- Phase 1 MET Towers
2004	RUS	High Energy Cost Rural Communities Program - GCW- Solar Power Construction Project
2005	DOE TEP	Tribal Utility Feasibility Study
2006	DOI EMDP	Biomass Feasibility Study
2007	DOI EDMP	Wind Energy Feasibility Study
2009	DOE TEP	Wind Energy Development Feasibility Study
2009	DOE EECBG	Juvenile Detention Center Solar System and Planning Office Energy Efficiency Improvements
2010	DOI EMDP	Solar Development Feasibility Study
2011	MEC	PV array at Peach Springs Elementary School
2012	DOE	START Program, Strategic Energy Planning
2014	DOI IEED	TEDC Grant – Tribal Utility Authority
2014	RUS	High Energy Cost Rural Communities Program – construct 20 mile power line for grid connection

In 2012, the Hualapai tribe received support from the START program to update their resource assessment analysis and project feasibility analysis. The technical assistance focused on evaluating a renewable energy project to assist Grand Canyon West's development (Knott and Davidson 16). During this process, the tribe developed the following energy vision statement: "developing community awareness and participation in responsible energy opportunities [equals] all Hualapais have a stake in the game!" (Knott and Davidson 23).

In November of 2012, after the START planning session ended, the tribe adopted a strategic energy launch plan. The tribe established the Hualapai Utility Authority in September of 2014. In 2014, the tribe moved closer to establishing a renewable energy micro-grid at Grand Canyon West when they received a grant from DOI IEED to prepare an energy capacity assessment report, negotiate power line right-of-way leases, and establish a training program for staff to learn how to operate the micro-grid (Knott and Davidson 29). The tribe also received a United States Department of Agriculture (USDA) Rural Utilities Service grant in 2014 to construct a 20.8 KV 20-mile long power line that will connect Grand Canyon West to the regional electric grid (Knott and Davidson 30). Hualapai tribe may also apply for a USDA loan to help finance their micro-grid. In order to use USDA loan funds though, the tribe needed to amend their constitution to allow the tribe to take on more debt. The tribe recently held a vote to amend the constitution and it passed, putting Hualapai one step closer to their renewable energy goals.

7.2 Community Capital Analysis

Using the community-based planning framework principles previously discussed in this paper and knowledge from a previous site visit, the following community capital analysis was conducted (see Figure 7-1). Hualapai is rich in all types of community capital, but appears to be especially rich in human and financial capital.

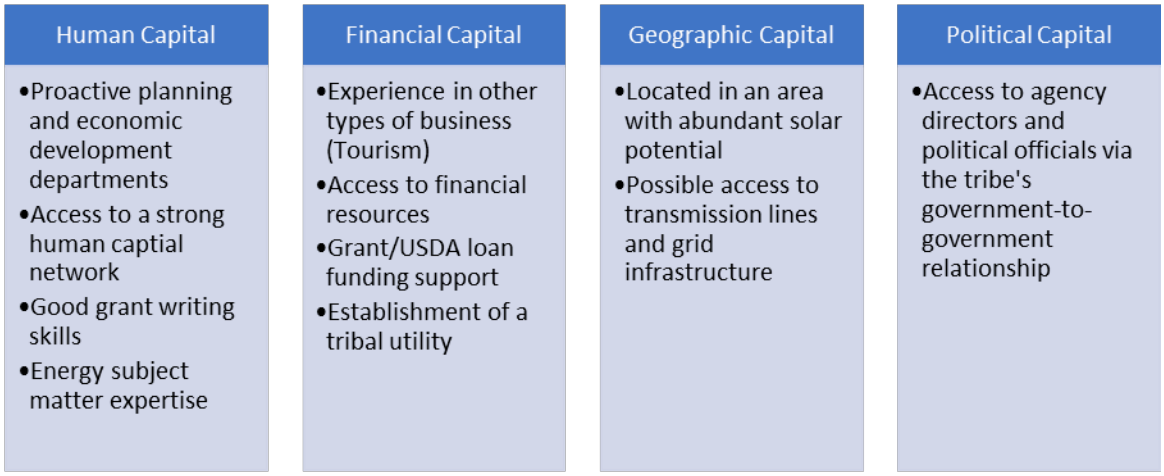

Figure 7-1. Hualapai Community Capital Analysis.

7.3 How Community Capital Assets Can Be Leveraged Moving Forward

The Hualapai tribe appears to inherently know where their strengths lie and have been effectively leveraging them for quite some time. The tribe has been extremely successful in their energy resource development endeavors and naturally plays to their strengths. Moving forward, the tribe can continue to exercise their tribal sovereignty via the finalization of a master plan or through the establishment of a micro-grid for Grand Canyon West.

8 CONCLUSION AND TAKEAWAYS

This asset-based framework was designed to be an additional resource for tribes, especially for tribes who experience difficulties progressing through the strategic energy planning process. The methodology may help to reframe the discussion and maintain a positive focus instead of devolving into a discussion of challenges and deficiencies. ABCD models are meant to help communities realize their full potential and regain control of their future. In this way, the framework may help tribes to more efficiently and effectively develop their energy resources.

Now that areas of difficulty within the nine-step community energy planning process have been identified, opportunities to offset these challenges can be developed. In the future, funding may be made available to specifically target tribes struggling with steps five and six in the process. The upcoming "First Steps" FOA may be able to address some of these challenges, but it has yet to be implemented—only time will tell. Until then, an asset-based framework can serve as a resource for tribes and could be introduced earlier in the process, for example through strategic energy planning workshops, training, or other outreach efforts.

Energy planning is a vital component in building more cohesive and resilient tribal communities. Communities that recognize their strengths and value their local knowledge become stronger together. In this way the framework goes beyond just an energy planning effort –it addresses deeper tribal community issues and enables tribes to design futures that best suit their needs and reflect their cultural values.

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10 APPENDIX A: ENERGY PROJECT FUNDING AND FINANCING OPTIONS FOR TRIBES

The following is a list of current grant opportunities for tribes. Additional programs and opportunities can be found using the Energy Development Assistance Tool on the Office of Indian Energy's website: http://www.energy.gov/indianenergy/energy-development-assistance-tool

Table 10-1. Grant Opportunities for Tribes, energy.gov/indianenergy/energy-development-assistance-tool.

Agency	Program	Description	Web Page
Department of the Interior: Bureau of Indian Affairs	Climate Change Adaptation	Provides grants to support tribal planning and assessment efforts for climate change adaptation and mitigation strategies.	http://www.indianaffairs.gov/WhoWeAre/BIA/climatechange/index.htm
Department of Commerce: Economic Development Administration	Planning Program and Local Technical Assistance Program	Provides partnership planning grants to Tribes to help develop and implement comprehensive economic development strategies and associated economic development activities.	https://www.eda.gov/funding-opportunities/index.htm
Federal Energy Management Agency	Preparedness (Non-Disaster) Grants	Provides preparedness program funding to enhance the capacity of their emergency responders to prevent, respond to, and recover from a range of hazards.	https://www.fema.gov/preparedness-non-disaster-grants
Department of Agriculture: Rural Development	Rural Community Development Initiative Grants	Provides grants to low income rural communities to improve housing, community facilities, community and economic development projects in rural areas.	http://www.rd.usda.gov/programs-services/rural-community-development-initiative-grants
Department of the Interior: Indian Energy and Economic Development	Tribal Energy Development Capacity Grant	Assists Tribes in the development of energy resources and further the goal of Indian self-determination.	http://www.bia.gov/WhoWeAre/AS-IA/IEED/
Department of Agriculture: Rural Development	Community Facility Grants	Provides funds to construct, enlarge, or improve community facilities for health care, public safety, and community and public services. This can include the purchase of equipment required for a facility's operation.	http://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program
Department of Agriculture: Natural Resources Conservation Service	Conservation Innovation Grants	Offers funding opportunities at the state level to stimulate the development and adoption of innovative conservation approaches and technologies that leverage federal investment in environmental enhancement and protection.	http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/cig/
Department of Agriculture: Rural Development	Rural Energy for America Program (REAP)	Provides grants to agricultural producers and rural small businesses for energy audits and renewable development assistance.	http://www.rd.usda.gov/programs-services/all-programs#Business
Department of Agriculture: Rural Development	Rural Utilities Service (RUS) Assistance to High Energy Cost Rural Communities Program	Provides funds to acquire, construct, extend, upgrade or otherwise improve energy generation, transmission or distribution facilities and to establish fuel transport systems that are less expensive than road and rail.	http://www.rd.usda.gov/programs-services/high-energy-cost-grants

Department of the Interior: Indian Energy and Economic Development	Energy and Mineral Development Program	Provides federally recognized Tribes and Indian allottees on trust land with financial assistance to evaluate energy and mineral resource potential on their lands and, in turn, the information they need to promote their lands, negotiate the best agreements with partners or investors, and develop their energy resources.	http://www.bia.gov/WhoWeAre/AS-IA/IEED/DEMD/index.htm
Department of Energy: Office of Indian Energy	FOA No. DE-FOA-0001621	The planned FOA will complement the technical assistance IE offers by providing funding to help tribal communities develop and sustain strategic energy solutions.	http://energy.gov/indianenergy/funding
National Oceanic and Atmospheric Administration, U.S. Department of Commerce, National Marine Fisheries Service	Coastal Ecosystem Resiliency Grants Program	The National Oceanic and Atmospheric Administration (NOAA) is seeking project proposals from non-federal partners to implement habitat restoration actions that will restore coastal ecosystems and improve resiliency. The primary focus is to develop healthy and sustainable coastal ecosystems through on-the-ground habitat restoration actions.	http://www.habitat.noaa.gov/funding/coastalresiliency.html
U.S. Environmental Protection Agency	EPA Clean Diesel Tribal Grants	The U.S. Environmental Protection Agency (EPA) is accepting applications to establish clean diesel projects. Applicants may request up to $800,000 in federal funding. EPA anticipates awarding up to five tribal assistance agreements and projects may include replacing, upgrading, or retrofitting school buses, transit buses, heavy-duty diesel trucks, marine engines, locomotives, energy production generators, or other diesel engines.	https://www.epa.gov/cleandiesel/clean-diesel-tribal-grants#rfp

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11 DISTRIBUTION

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