

## **DOE Office of Indian Energy Foundational Course: Strategic Energy Planning (text version)**

Below is the text version of the Webinar titled "DOE Office of Indian Energy Foundational Course: Strategic Energy Planning."

*Amy Hollander:*

Hello. I'm Amy Hollander with the National Renewable Energy Laboratory. Welcome to today's webinar on strategic energy planning sponsored by the U.S. Department of Energy Office of Indian Energy Policy and Programs. This webinar is being recorded from DOE's National Renewable Energy Laboratory's brand new state-of-the-art net-zero energy research support facility in Golden, Colorado. Our strategic energy planning presentation today is one of nine foundational webinars in the series from the DOE Office of Indian Energy Education Initiative, which is designed to assist tribes with energy planning and development.

The course outline for this presentation will cover who the DOE Office of Indian Energy Education is and what is this initiative, the course introduction, what is strategic energy planning, developing a strategic energy plan, key aspects of successful energy planning, and additional information and resources. The Office of Indian Energy is responsible for assisting tribes with energy planning and development, infrastructure, energy cost, and electrification of Indian lands and homes. As part of this commitment and on behalf of the U.S. Department of Energy, Indian Energy is leading education and capacity building efforts in Indian country. The foundational courses were created to give tribal leaders and professionals background information on renewable energy development that presents foundational information on strategic energy planning, grid basics, and renewable energy technologies that breaks down the components of the project development process on the commercial and community scale and that explains how the various financing structures can be practical for projects on tribal lands.

For today's webinar we have two speakers: Lesley Kabotie of Kabotie Consulting and Alex Dane of the National Renewable Energy Laboratory, known as NREL. First I'm honored to introduce Lesley Kabotie. As a member of the Crow Tribe of Indians in Montana, Miss Kabotie received her undergraduate degree from Stanford and a master's in non-profit management from Regis University. Miss Kabotie brings 20 years of experience working with tribes and has her own consulting firm, Kabotie Consulting. Miss Kabotie consults with tribes in the areas of education, healthcare, technology, energy and environment, and community development. Kabotie Consulting is a Native woman-owned business.

Next I'll introduce Alex Dane, who is a project leader at NREL. He specializes in strategic energy planning and sustainable community development solutions for local governments. With graduate degrees in urban planning and public administration from the University of Colorado, he brings a broad perspective to energy design, with community and environmental sensitivities. Currently Mr. Dane works with a number of tribal governments in the American West and Alaska implementing renewable projects

and engaging in long-range planning efforts. And with that, we will start the webinar with Alex Dane.

*Alex Dane:*

Thanks, Amy, for your introduction. This course will include the following discussion topics: what is strategic energy planning, developing a strategic energy plan, key aspects of successful planning, additional information and resources. Lesley will start us off now describing some of the fundamental aspects and benefits of strategic energy planning. Lesley.

*Lesley Kabotie:*

Thank you, Alex. Strategic energy planning creates an opportunity for tribes to engage communities, programs, and development stakeholders in a process to define how energy development can catalyze or freight the growth and development vision the community has for itself. Strategic energy planning asks participants to claim the specific spot on the horizon that is desirable to them. Rather than saying, "We want to be at least 150 miles north in 10 years," participants define the specific place in their future that is desirable, pinpointing what energy will be doing for the community, how it will be used, and in what industry. We will look at how the needs of the community are addressed in a manner that allows session participants to paint the picture of how energy development serves the developing needs of the tribe and the future well being of all of its communities and industries.

The plan needs to address the energy use priorities of the nation's future. Strategic energy planning engages participants in a process to take a long-range view of the future to achieve priorities for the community, rather than thinking about energy development in short-term cycles of funding and grants. In a nutshell, strategic energy planning brings the desired energy future into clear focus, considers current reality, and leverages local resources, considers hurdles and challenges before you reach them, maps out efficient path to achieve your desired energy future, clarifies progress indicators, and documents the game plan for short- and long-term success. Oftentimes tribal energy development is misinterpreted as a commodity to be traded rather than a resource to be used for the basic needs of the community.

In fact, energy development can stimulate opportunities that serve all of the sectors of the tribe if it is inclusive in the planning stages. The future of the tribe resides within the imagination, ownership, and participation of its members and constituents. Tribes work continuously to assemble the framework for healthy, self-sustaining economies that can support viable, active community in every aspect. Strategic energy planning is an excellent opportunity to lay the foundation for stimulating and mobilizing the growth and viability of the tribal economy if the right people are at the table during the planning.

To address what makes energy planning strategic, allow me to start at the beginning with a review of the fundamental basis for a healthy economy for tribes in the US. Okay. So our US economy is made up of three sectors. The first sector is the public or governmental sector. This includes the tribal administration, the county, state, and

federal government. The job of the public sector is to provide the infrastructure that allows us to live as communities: roads, water lines, power, energy, schools, etcetera.

The second sector, or the private sector, concerns itself with the sale of goods and services. The strength and prominence of our private sector is a hallmark of the American economy. The third sector or the non-profit sector is common around the world now, but it began in America and serves the needs of community that fall outside of the interests and abilities of the government and the private sector. Things like children's activities, young parent programs, veterans programs, etcetera.

The IRS created tax-exempt status to stimulate economic flow into American communities through the non-profit sector. In the past 20 years, the money flowing through American communities through the third sector has reached the multibillion dollar mark annually, such that this segment of the economy has warranted its own notation as the third sector. The triangulation of economic flow through these three sectors makes our American economy among the strongest in the world. Even when we waste large sums of money in one sector, the economy still stands because of the strength and viability of the other sectors.

In Indian country, our economy looks like this. The private sector is only marginally developed. If we were to draw a line and be really generous, say our economies are developed to a full 50 percent capacity – which we know they're not – this line extends halfway. On my reservation, we only tax TERO-qualified projects, those that are federally funded. We exercise a nominal tax rate that feeds a few tax dollars back into the tribal public sector.

The tribal public sector, the tribal administration, is largely financed through the sale of tribal resources, primarily non-renewable resources. On my reservation, coal sales finance our tribal administration's capacity to care for all of the needs on the reservation. Let's say our tribal public sector is financed to a full 30 percent of what it needs. The non-profit sector is only marginally developed, with a few non-profits operating here and there. There is a misunderstanding that non-profits compete with tribal government access to funding, but the reality is non-profits are largely funded by monies from private individuals, individuals who will never, ever write a donation check to the tribal government.

On my reservation, there have been 35 or so non-profits organized in the last 50 years, with only a handful operating today, maybe a dozen or so. So the third sector is wholly undeveloped in the reservation economy. When we talk about our tribal economies being vulnerable and on the verge of collapse or at risk, the status of each of these sectors in the local tribal economy is what's being referenced. Whether an individual agrees with it or not, as sovereign nations operating within the U.S. economy, tribal participation and capacity to engage this economic model has a direct influence on tribal viability.

Tribal strategic energy planning presents an opportunity to engage stakeholders from each of these dimensions of the community economy in a dialogue to vision a future

where each of these sectors is energized and fully activated for the benefit and well being of the community. Tribal strategic energy planning also presents an opportunity to mobilize the long-term support necessary for energy project development that goes beyond the term of one political administration over another. When a broad cross section of community can see and understand what energy development does for the well being of everyone and how it meets the needs of the individual as well as the community, the likelihood of success is high because the widespread solid support that exists for the plan. This level of inclusiveness in the planning process, engaging the participation and imagination of stakeholders from each of the segments of the community interest is what makes energy planning strategic.

It essentially achieves stakeholder buy in to long-term vision, political commitment to mobilize authority and resources, and identifies energy uses and future needs or baseline. One thing to keep in mind is that larger-scale energy projects take a long time to develop, anywhere from 2 to 3 years on the quick end to 20 to 50 years on the long end depending on the type of energy development that is right for your nation. The key to effectively formulating a leadership team for the plan is to consider longevity and durability of ownership of the plan to keep the ideas, the enthusiasm, and commitment to persevere alive within the community and within the administration and technical team tasked with implementing the strategic energy plan. So who is on the team is important and should be carefully considered.

You want to seed your planning leadership team with innovators and deep thinkers from each sector of your emerging tribal economy who have staying power in the community and can carry on the story, context, and framework for the strategic energy plan. Some participants may be new or emerging leaders in the community, not just people with the right idea, but those committed to the long-term task with personal and political influence. You want to include individuals with authority to direct resources, individuals with a passion for the destination, individuals with influence in the community and administrative abilities to keep the project alive, individuals with the technical ability, and individuals who can tell the story. Try to avoid over populating your planning leadership team with exclusively political appointees, exclusively technical staff, and exclusively implementers. Now I'm gonna turn it over to Alex to discuss steps in strategic energy planning.

*Alex Dane:*

Thanks, Lesley. That's a great introduction to the strategic importance of energy planning at the community and tribal level. This graphic shows the steps that are involved in the energy planning process. As a whole, the number of steps in the process may seem daunting, but as we break it down, the steps will reflect a natural progression of informed and achievable decision making. The first steps in strategic energy planning include identifying and convening stakeholders, forming the leadership team, and developing an energy vision.

These are the critical first steps to organize a tribal effort and plan the action items. The first steps in each process are to plan who will be involved and work towards a shared

vision. Let's talk about each step. Identify and convene stakeholders. What it is: Identify a team of people you feel are critical to developing and implementing a strategic energy plan.

They have a balanced representation, so different players' views and interests are involved to ensure a representative outcome. Why it's critical: Without genuine support from stakeholders, your project will be a government only effort at best. Example roles include representatives from tribal members, council, government, utility, and other enterprises as well as large energy users and local utilities. A key success component is to select an energy champion to shepherd the process.

Forming a leadership team. What it is: Selecting a small group of decision makers who can direct this effort by creating new policy for energy, allocating resources, setting goals and priorities. Why it's critical: One champion is never enough to create lasting change. A leadership team brings together more ideas and decision makers who have a vested interest in the project's success. Draw leadership team members from the team of stakeholders.

Developing an energy vision. What it is: An energy vision is a statement of the desired result of your energy performance improvement efforts. Examples include increasing energy reliability, minimizing environmental impacts, using local resources, economic development such as jobs, revenue generation, stabilizing energy cost, and others. Why it's critical: All participants need to understand the end game if they're to develop the right tactics.

The tactics we might use to pursue carbon neutrality are different from those that we would pursue if cost savings are our primary goal. These are the first steps that are important as a tribe moves through the initial phases and activities in strategic energy planning. Now that we've explored the first steps of the planning process and how to shape an effective leadership team, it's appropriate to move into the next steps of the planning process. These steps include assessing energy needs, developing specific goals, prioritizing projects and programs, and identifying financing options.

These steps reflect the necessary effort that your leadership team will need to understand the current energy environment. Then it will be easier to prioritize efforts and make important decisions. Let's talk about each step. Assess energy needs. What it is: An evaluation of energy performance throughout your community's building stock, operations, vehicle fleet, and activities.

Why it's critical: The baseline serves as a starting point for all analysis. It identifies the largest energy users and helps to form the potential project opportunities. There are tools to assist you in this such as energy audits, in the US, Environmental Protection Agency's, or EPA, their portfolio manager. The assessment should include a forecast of future energy load such as any planned new buildings or enterprises. The assessment should also incorporate a verification of current energy service providers.

Develop specific goals. What it is: Near and mid-term goals that will help the community achieve its overall objective. Why it's critical: While the overarching vision is important, these specific goals represent the critical steps to achieve that vision. By stating near-term and mid-term goals, you provide the team with targets at which to aim their implementation strategies.

Goals also provide an effective way of setting priorities when time or money is constrained. Some examples include, "Our tribe will reduce its energy consumption by 20 percent in 2022. Our tribe will obtain 50 percent of electricity from renewable sources within 10 years." This is similar to a renewable portfolio standard or RPS. "Our tribe will reduce energy cost by 40 percent in the next 5 years," or even, "Our tribe will become carbon neutral in the next ten years."

A more specific situation to demonstrate the need for clearly stated goals are a single goal of electricity from renewable sources may result in a biomass generator fed by pellets, when a goal of electricity from renewable sources and five new jobs would more likely result in a biomass generator fed by woodchips. Prioritize projects and programs. What it is: An evaluation of the strategies proposed to achieve specific goals. This evaluation typically determines which projects and programs will achieve the greatest results with the least amount of money or effort.

Why it's critical: Every organization is resource limited, local governments especially so. By pursuing the strategies with the highest impact first, your community can build a record of success that should free up additional support for more efforts in the future. Develop a ranking system to evaluate the cost effectiveness of options. Total resource cost and levelized cost of energy are two methods of conducting an evaluation. Policy and programs can take the form of incentives, codes, standards, or even guidelines.

Identify financing options. What it is: An identification of the options available to fund new projects or strategies. These sources are typically more diverse than the line item funding in a government budget. Why it's critical: Identifying potential sources of grant and especially private financing options are a valuable way to accelerate progress towards your energy vision. Potential sources include tribal funding, federal agency technical and grant programs as well as state and non-governmental organizations.

The steps involved with energy planning so far have focused on the process and the actions involved. A result of all this activity and momentum guarantees a substantial amount of information has been developed on the tribal energy vision, energy baseline data, details on various project options, and different financing options as well. Now is an appropriate time to compile all of this information into a strategic energy plan. The plan serves to document and gather information, to formally establish the energy vision, to set goals and priorities, and document the decisions and input from the tribal community and leadership team.

In more detail, the final stages of the process include two steps: developing the strategic energy plan and keeping an ongoing awareness for project and planning adjustments.

The strategic energy plan is not only a written plan, but a living document serving as the basis to adjust to changing circumstances and different opportunities. The strategic energy plan serves various purposes and functions. A few of the different purposes of the strategic energy plan include documenting near-term goals, sustaining the momentum of the planning process, and achieving long-term goals.

Some of the functions of the strategic energy plan include creating a roadmap to hold the tribe accountable to the destination and energy vision. The plan can provide the means to consistently share the stories with others, and the plan also creates a resource to help guide and filter priorities, providers, and decisions that need to be made. Compiling the energy plan. What is this? Well, it's turning this planning effort into a single document that can be expressed in vision, goals, strategies, and specific projects that will be implemented.

Why is this critical? Well, at some point all of these ideas need to be blessed by elected officials and proclaimed as new action items and policy. Having a final plan creates that point for approval. The written plan is also a valuable tool to give to new employees, businesses, tribal members, and others as a single document they can refer to in order to understand your tribe's energy plan.

The final stage is measurement and verification and plan alterations. What is this? Measurement and verification, or M&V, is a measurement of your efforts to ensure that they are working as intended. This allows you to defund projects that are not achieving desired results and add additional focus on effective programs. Why is this critical? Well, measuring your activities allows for feedback into the plan and it allows for it to be a living process that will continue to be effective in the future. And now Lesley is gonna discuss key aspects of successful planning efforts. Lesley.

*Lesley Kaboutie:*

Thank you, Alex. Achieving tribal development priorities is a complex, multidimensional task that involves many players working through resolving issues and activating many different assets, resources, and opportunities along the way. Strategic energy planning is the vehicle that promotes and paves the way for coordinated action among all of the key players, stakeholders, and influences in the energy project development process. A good strategic energy plan puts tribal leadership in the driver's seat and provides the means for everyone else to sync up to the project effort in a timely, coordinated fashion. Proper planning and strategic energy planning development helps direct action, sustain momentum, motivate development, reduce and minimize reactive decision making, and go the distance.

Amongst hundreds of strategic plans, there are many shining examples of success. Among those that fail, there are some common predictable elements that can be avoided or minimized if they are understood and accounted for from the outset. It's not surprising that the reasons plans fail is largely because of the way people engage leadership, each other, and the community in the various and ongoing stages of implementation. When strategic energy plans fail, they do so because of shortsighted predictions of the situation

or timeline, unrealistic predictions of resources, uncoordinated implementation, narrow ownership, failure to follow the plan, and/or poor or even casual communication. That concludes my section of the webinar, and Alex is going to conclude with some final items.

*Alex Dane:*

Thank you, Lesley. You can see how we followed this outline to hopefully give you a path to planning your energy projects. We want to leave you with these Web link resources to give you more information to plan you projects. The first resource is the energy resource library. This comes from the US Department of Energy Office of Indian Energy.

The second resource is a document called “Community Greening: How to develop a community energy plan.” This comes from the National Renewable Energy Lab as well as the US Department of Energy. And the final resource is a guide to tribal energy development, and this comes from the Tribal Energy Program, which is part of the Department of Energy’s Office of Energy Efficiency and Renewable Energy. We encourage you to check out these resources for your project planning. Thank you for joining us today. If you have questions, feel free to email Lesley or myself. Or for a faster response, email us at the top selection, the technical assistance website at [indianenergy@hq.doe.gov](mailto:indianenergy@hq.doe.gov). Thank you for your time.

*Amy Hollander:*

Thank you Alex and Lesley for that excellent overview of strategic energy planning. There are two series in the program: the foundational courses and the leadership or professional courses. The foundational courses give basic information on renewable energy technologies, strategic energy planning, and grid basics. The leadership and professional courses cover more detail on the components of the project development process and existing project financing structures.

The foundational courses are divided into energy basics and renewable energy technologies. Energy basics include assessing energy needs and resources based on a tribe’s location and available resources. Electricity grid basics review the types of utility grids in the United States and resources of how tribes can tie into or be independent of existing power grids. Strategic energy planning teaches the steps to take when setting up renewables. The renewable technology webinars give basic information on the types of renewables that are successfully used in today’s world. Be sure to visit the DOE Office of Indian Energy website to find these webinars and other tools. And that concludes our webinar.

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