Effective Community-Wide Policy Technical Assistance:

The DOE/NREL Approach

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Examples of Clean Energy Policies

- Building Codes
- Renewable Portfolio Standards
- Energy Efficiency Resource Standards
- Net Metering
- Interconnection
- Appliance Exchanges
- Appliance Rebates
- Density Bonuses
- Smart Metering
- Grants
- Tax Incentives
- Industry Recruitment Incentives
- Loans
- Loan Guarantees

Ten 1.25MW wind turbines supply renewable wind energy to the town of Greensburg, Kansas. NREL PIX #17589

Helping Communities Implement Clean Energy Market Transformation Policies

DOE and NREL have worked with multiple states and localities to provide unbiased policy impact information and assist in the development, implementation, and evaluation of effective clean energy development policies. **This document compiles lessons learned and provides a step-by-step process for implementing effective policy assistance.** Project-related technical assistance gives communities access to tools (e.g., anemometers) and expertise (e.g., engineers with analysis and installation experience) needed to develop clean energy projects. Similarly, policy-related technical assistance provides communities with tools (e.g., other localities' best practices for effective policies) and expertise (e.g., policy developers with clean energy policy or planning experience) to implement policies that reduce nontechnical barriers and facilitate project development. While the needs and existing policy environments differ considerably between jurisdictions, the pathway for delivering technical assistance has many commonalities.

The Policy Technical Assistance Process

Since 2007, DOE has participated in multiple community-wide efforts aimed at increasing energy efficiency and renewable energy resource development. Some of these efforts are associated with disaster recovery (e.g., New Orleans, Louisiana and Greensburg, Kansas), and others are attempts to bring nationwide expertise together with jurisdictions to meet large-scale clean energy objectives (e.g., State of Hawaii, State of Alaska, Energy Development in Island Nations).[1] These multifaceted projects include:

- Stakeholder development
- Strategic energy planning[2]
- Project identification, planning, financing, engineering, and deployment
- Transmission and infrastructure development
- Program and policy development and implementation support.

Department of Energy (DOE) and the National Renewable Energy Laboratory (NREL).

[1] http://www.edinenergy.org/

[2] http://www.nrel.gov/applying_technologies/pdfs/community_greening.pdf

This document focuses on the process for program and policy development and implementation support of technical assistance. The actual implementation of policies and programs depends on the needs and actions of the community. Policies at the state and local levels are set by policymakers within those jurisdictions. **The policy technical assistance process can help identify barriers to clean energy development, provide policy options and examples for removing those barriers, and project the impacts of those policies on different success metrics**—such as job creation, greenhouse gas reductions, impact on energy prices, and the potential for the development of clean energy projects. **Figure 1** provides a summary of the policy technical assistance process.

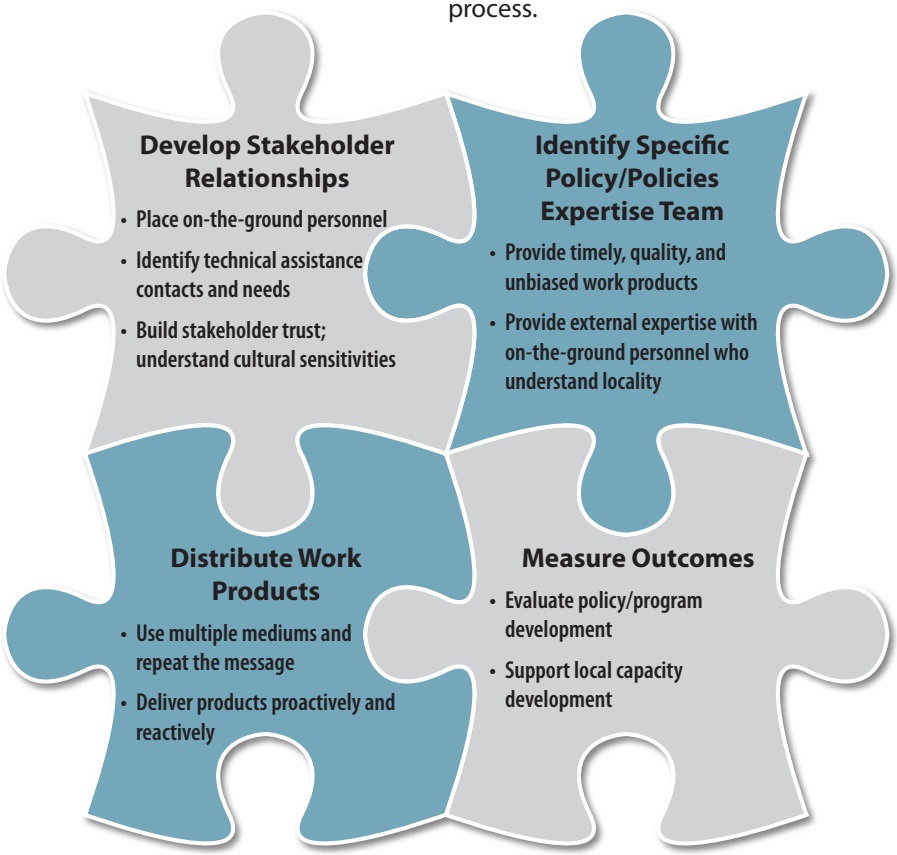

Figure 1: Policy Technical Assistance Process

The concept of policy technical assistance stems from the idea that policy experts (at DOE, universities, national laboratories, etc.) have insights based on work with states and localities that could assist others in the development of clean energy policies. Multiple technical assistance programs have been set up (e.g., DOE/EERE/WIP Technical Assistance Program [TAP]) to assist in the transfer of information.[3] The traditional technical assistance process is described in **Figure 2**.

[3] Policy technical assistance is one of many categories of assistance offered by the DOE/EERE/WIP TAP program.

Figure 2: Traditional Technical Assistance Process

With the increase in interest from states and localities with less background knowledge on the policies required for clean energy market transformation, the process for technical assistance has evolved to offer feedback between the question asked and the information development phase. This process is particularly important when a community has motivation to implement market transformation policies, but has little knowledge on where to begin.

The whole-community, longer-term approach allows for question development, discussions, and a feedback cycle in which the technical assistance provider can work with the community continuously on a number of subsequent questions **(Figure 3)**. Ideally, this type of relationship allows for in-depth information development relevant to the locality and more effective delivery of that information, leading to increased likelihood of adoption and implementation of more effective clean energy policies. **The iterative cycle of technical assistance is particularly effective for this whole-community approach, in which localities need assistance on a wide variety of policy topics.**

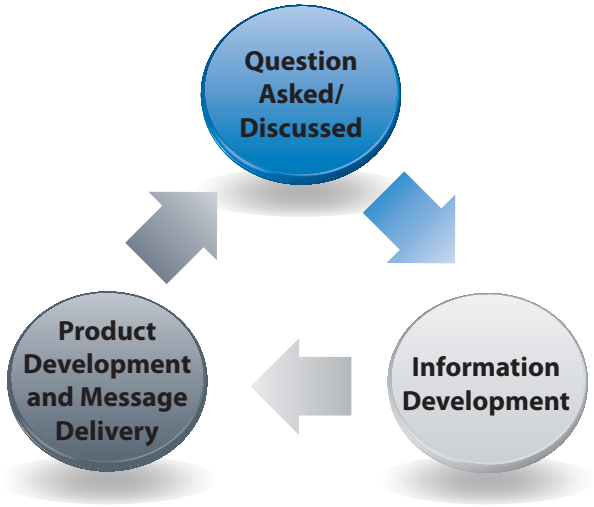

Figure 3: Community-Wide, Longer-Term Technical Assistance Cycle

There are three steps to this type of technical assistance **(Figure 4)** that help achieve the goal of providing the locality with the tools necessary to implement clean energy:

1) Laying the groundwork. This step involves gathering or integrating with local stakeholders for the purpose of understanding the needs and capabilities of the group and identifying areas where technical assistance will be most effective. Understanding the community drivers improves the quality and effectiveness of the technical assistance provided.

2) Structuring the technical assistance. In this step, the technical assistance team works in collaboration with the community to develop a plan for identifying and evaluating policies according to the impact on the goals of the community.

3) Repeating the message, again. A critical piece of policy technical assistance is getting the information developed out into the community in multiple ways. Also, since the stakeholders change over time, it is important to repeat the message to new audiences so that there is broad understanding of the policy choices and their impacts.

The following section provides more detail on the elements of each step in the process.

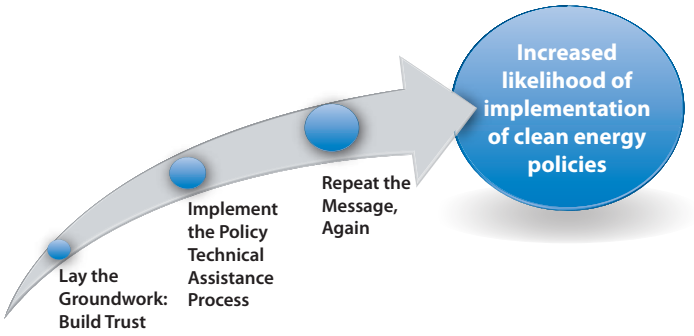

Figure 4: Steps within the Policy Technical Assistance Cycle

Step 1: Laying the Groundwork

In order for policy technical assistance to be effective, trust needs to be built within the community. The issue of trust is related to the role of the technical assistance providers as well as the dependability of the providers over the duration of the project. Typically, trust is developed by a local staff member as well as through high quality, timely analysis to critical stakeholders. This trust allows for the technical assistance team to balance advocacy-oriented opinions with dependable methodologies for actual costs and benefits of different policies. This role of the technical assistance team—to create an environment where unbiased analysis of policy impact is the primary metric for evaluation—is critical to developing a long-term working relationship among multiple parties.

The existence of a staff member partially or fully on location is critical in implementing effective policy assistance. The roles of this person include:

- Building trust in the community
- Alerting city and council staff to the availability of this type of technical assistance
- Understanding cultural- and community-specific sensitivities
- Understanding the community's energy-driven goals
- Working with the policy assistance team and locality to identify initial policy assistance needs
- Tailoring the message to the appropriate audience.

Step 2: Structuring Key Components of the Technical Assistance

While trust building can be a personality-driven and time-consuming task, structuring the technical assistance is a more straightforward process. Experience indicates that there is a cyclical structure to developing increasingly implementable, politically palatable, and effective policies **(Figure 3)**. This section provides the details of the community-wide technical assistance process.

Understand the Policy Landscape

Understanding the policy landscape is the foundation of providing reactive and proactive policy technical assistance. The more the landscape is understood, the more likely that the policy assistance will be relevant and politically feasible. The landscape is an overview of the locality's energy structure and history **(Figure 5)**, including:

- **Structure of government.** Understanding the unit(s) of government to which the technical assistance will be provided is important to identifying appropriate technical assistance. At the local level this involves identifying whether there is a strong mayor system, a city council–driven system, or a county government system.
- **Utility type and regulatory body.** Utility involvement in clean energy policy development varies by utility type: municipal, IOU, or cooperative. The regulatory body is also relevant to policy development and implementation.
- **Other stakeholders.** Every community has a number of nongovernmental interested parties, including the utility, consumers, trade associations, and others that are variously involved in different aspects of energy policy development. In some localities, these interested parties are gathered through a preexisting energy policy reform effort into which the policy assistance staff is able to integrate. In other localities, the development of relationships with these groups may be more challenging. Communities may also have "energy champions," or stakeholders with interest and contacts in clean energy market transformation. Identifying and enabling champions is critical to long-term market transformative success.
- **Existing energy policies.** A thorough review of existing and in-development policies contributes to developing a baseline of opportunities within the locality.
- **History of energy policies.** This can be the most challenging aspect to identify because policy that is not implemented is not typically tracked effectively. Interviews and conversations with government and other stakeholders can be an effective strategy for gathering this information.

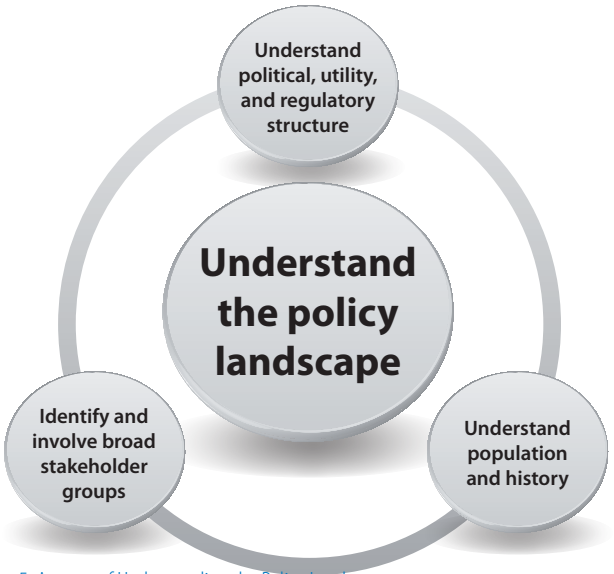

Figure 5: Aspects of Understanding the Policy Landscape

Understanding the policy landscape is important because it informs the policy assistance team's discussion with different actors in the locality regarding the assistance needs of the locality. An educated policy assistance team contributes to the development of trust from those actors.

In some instances, however, it is not possible to know the history or actor interests, as they are embedded with particular individuals (often energy champions) and not part of any official record. A balance—between spending a significant amount of time (and budget) attempting to understand the landscape through stakeholder interviews and learning by reacting to locality technical assistance requests—is necessary and depends on the needs of the locality and on overriding drivers for the assistance from DOE headquarters. Developing a strong and trusted relationship with local actors can aid the technical assistance team in "learning while doing."

Figure 6: Aspects of Developing Policy Information

Develop Work Products

In general, there are four qualities of the work product that are necessary for successful policy technical assistance **(Figure 6)**:

- **Location specific**. To the extent possible, analysis of policy options needs to be tailored to the local community in terms of demographics, climate, existing policy, and interests of the local government and other stakeholders. While comparing other programs is never precisely reflects how they would be developed in another location, targeting the policy technical assistance as much as possible is critical to developing trust, buy in and ultimately effectiveness of policy implementation.
- **High quality**. While it should go without saying, the work products prepared by the DOE policy technical assistance team must be high quality and correct, representing the most appropriate methodology for the questions asked. High quality also includes a high level of transparency and clarity of methodologies and approaches in answering the community questions surrounding clean energy.
- **Unbiased**. One of the major benefits of having DOE-supported technical assistance is the unbiased, technology-neutral nature of the assistance, as opposed to having advocates providing technical assistance that may be skewed toward a particular outcome.
- **Timely**. The policy technical assistance needs to be delivered in a timely manner so that the information can be used in legislative sessions, the development of policy in working groups, or any number of other time-sensitive strategies. In disaster recovery situations, policy technical assistance is best performed after immediate relief efforts, in the early stages of recovery during construction and infrastructure redevelopment.

Energy efficiency strategies include daylighting, a well-insulated envelope, ground source heat pumps, and PV panels. NREL PIX #17573

Courtesy of Hawaiian Electric Light Company (HELCO)

Figure 7: Information Delivery Options

Deliver the Message

The mode of the message delivery is critically important to the effectiveness of the policy assistance. While the background detail of the analysis is necessary for ensuring and supporting a quality work product, it is much less critical as the showpiece of the work. There are a wide variety of modes of information delivery **(Figure 7)**.

These modes of outreach are selected both opportunistically and because they fit with the needs and existing structure of the locality. Typical technical assistance requests fall into two categories: identification of broad opportunities for clean energy policy implementation, and narrow requests for evaluation of specific policies. Both types of requests lend themselves readily to research report modes of outputs, as the methodology can be extensive, especially when presented to a nonexpert audience. Taking the time to do a broader, wider research report in the early stages allows for rapid redistribution of unbiased, high-quality work, instead of a sequence of rushed outputs. Accessibility of the research reports is a concern, however, and more concise letter reports/memos targeting the policymaking and high-level staff audience follow. Talking points, presentations, and meetings (derivative deliverables) can then be developed to address the concerns of different audiences.

The cyclical process of community-wide technical assistance leads to an increased number of derivative deliverables based on existing methods and research reports, allowing for quicker, wider distribution of existing information. These requests can be developed based on the already established methodology, so the research report step is minimized (or transitioned into case study development) and more attention can be focused on deploying the information to a wider variety of groups in a straightforward format.

Policy technical assistance could be augmented with increased use of newer technologies, such as the internet through web sites and social media, radio, TV, pamphlets, mailers, and newsletters. Future policy assistance efforts may benefit from further incorporating these sources to alert interested parties to the ongoing work and information available regarding policy opportunities, unbiased analytic information regarding the costs and benefits of such policies, and details on upcoming events where policies will be discussed.

The barriers to these methods come from the reactive nature of the initial policy assistance. Request-driven technical assistance (that effectively builds trust) does not allow much time to be spent proactively thinking about wider audience outreach in the initial stages. In addition, bureaucratic processes for Web development and posting guidelines can be challenging hurdles for a team trying to react quickly. Predesigned and approved templates that the policy assistance team can populate with information may streamline the process for using these potentially effective modes of information distribution, focusing the process-oriented approvals on the content instead of the distribution medium.

Repeat and Refine the Cycle

As more questions are asked of the policy assistance team the cycle continues: more information is contributed to understanding the landscape; more specific or questions of different topics are answered through robust methodologies with unbiased, high-quality, and timely results; and the information is delivered to an increasingly robust network of interested parties.

3 Step 3: Keep Delivering the Message to Build Momentum

In the traditional technical assistance structure, the delivery of the work product—an answer to a question—was the endpoint of the project. In whole community technical assistance, message repetition serves a dual purpose. The first is to inform the technical assistance cycle: the work product can inform later questions or identify a narrower need of the community. The second is to spread the information produced across the widest possible area, thereby increasing the likelihood that it will be picked up and carried to an end in which policy is effectively implemented or executed. This can include information delivery through multiple modes as well as tailoring information to different audiences at different times. Because the length of the policymaking process can be long and involve multiple players, the primary role of the policy assistance team, especially once there is a lot of available information tailored to the community, is likely to involve repackaging and delivering the material to new audiences, or delivering the material in new ways to the same audience. Although not a part of the traditional technical assistance process, this step is critical to the success of actual policy implementation and the likelihood of successful transition to market transformation.

Credit: iStock

Measuring Outcomes

Policy technical assistance lays the groundwork for long-term market transformation and, over time, leads to the development of clean energy resources. One of the greatest challenges of measuring outcomes from this type of technical assistance is the length of time it takes to achieve tangible outcomes. Even in the best cases, the policy cycles may move slowly, and once policy is in the implementation phase, rules and regulations can take months or years to develop. Beyond that, deployment of clean energy projects takes time. There are two primary ways to evaluate the effectiveness of the policy technical assistance.

First, evaluate the extent to which the technical assistance works with multiple policy options and stakeholder groups. This strategy allows for broad deployment of information and may facilitate faster uptake and implementation of clean energy policies and, therefore, technologies. While some policies can be developed and implemented faster in whole-community policy technical assistance, another aspect of the value of the assistance is in the education of the local stakeholder regarding the value of clean energy, the options for different types of policies, and the information on other localities' actions in this arena. As these become a part of the community's lexicon regarding energy policy, the lasting impact can be an ethic of clean energy policy development in the community that lasts beyond the currently elected officials.

Second, evaluate the extent to which the policy assistance team helps integrate and educate local stakeholders. This interaction develops local capacity to carry out analysis and deployment of information after the completion of the official technical assistance. These capabilities and networks of policy analysis and deployment teams can support new capabilities for jobs in the locality.

Successful Policy Technical Assistance

- Facilitation of clean energy policy implementation (may be long term)
- Capacity development of local stakeholders in policy identification and evaluation

Credit: Ryan, Joe - NREL - 12661

Courtesy of Hawaiian Electric Light Company (HELCO)

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