Community Energy Planning: Best Practices and Lessons Learned in NREL’s Work with Communities

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Find the full best practices report: https://www.nrel.gov/docs/fy22osti/82937.pdf
Purpose of this training:
To inform and enhance NREL’s and other’s capabilities in community energy planning

Agenda:
• 12:00-12:05 JISEA’s Sustainable Communities Catalyzer
• 12:05-12:20 Definitions & concepts
• 12:20-1:00 Five best practices in community energy planning
• 1:00-1:30 Q&A
JISEA’s Sustainable Communities Catalyzer
Structured crosscutting energy analysis catalyzers* with time-limited topics to expand NREL critical objectives/goals and develop new strategic capabilities

*Catalyzer = an incubator with the objective to create new capability
JISEA’s Sustainable Communities Catalyzer

Advance understanding of social, economic, environmental, and land use impacts of clean energy transitions and map pathways for sustainable, equitable transitions, with a focus on rural and disadvantaged communities

Lead PI: Megan Day    Intern: Liz Ross

The Catalyzer worked to advance sustainable communities’ analysis and build capabilities within NREL to support community energy planning.

- **Journal article**: Intersections of Disadvantaged Communities and Renewable Energy Potential: Data Set and Analysis to Inform Equitable Investment Prioritization in the United States
  - Dataset
  - Presentation
- **Research Highlight**: Community Energy Planning: Best Practices and Lessons Learned in NREL’s Work with Communities
  - Training: 9/6/22, 12:00
- **Research Highlight**: Local Power: Comparing County-Level Renewable Energy Potential to Consumption Using the SLOPE Platform
- **Training**: NREL Tools for Community Energy Planning
  - 9/15/22, 12:00: Climate, Place, and Equity – Tamika Butler
  - 9/20/22, 12:00: From Values to Implementation: A Framework for Operationalizing Equity in Community Energy Planning – Clean Energy Work’s Tamara Jones and Dr. Anthony Kinslow II

**Aligns with NREL’s strategic plans in:**

- Integrated Energy Pathways
- Electrons to Molecules
- Contributing to the administration’s climate and environmental justice priorities.
The growing role and interest of local jurisdictions in energy planning and decision-making:

- **188** communities in the U.S. are committed to transition to 100% clean energy by 2050 or sooner (Sierra Club 2022)
- **332** U.S. members and **2,500** international members of ICLEI – Local Governments for Sustainability (2021)
- **11,752** cities around the globe, representing more than one billion people, are committed to the Global Covenant of Majors for Climate (2022)
Best Practices for Community Energy Planning

Assembled by conducting interviews with seasoned NREL practitioners & supplemented with a literature review

Findings include **5 Best Practices for Community Energy Planning:**

1. **Do your homework** in preparation for community interactions.
2. **Be humble, authentic, and honest** in your interactions with community members.
3. **Respect community agency** in every step of the process.
4. **Meet the community** where they are.
5. **Democratize participation.**

Find the full best practices report: [https://www.nrel.gov/docs/fy22osti/82937.pdf](https://www.nrel.gov/docs/fy22osti/82937.pdf)
Definitions & Concepts
Energy Planning

**Community**: A single entity (e.g., a municipal utility) or multiple stakeholders (e.g., various community groups and government departments)

**Community engagement**: Collaborating with stakeholders and community members to identify and evaluate clean energy solutions

**Technical assistance**: NREL modeling, analysis, and capacity-building that helps stakeholders learn how to achieve their goals
Energy Planning

Community energy planning:

• Type of technical assistance

• Working with communities to identify their energy-related goals and outline potential solutions

• Varying timelines and resource availability
  • These best practices assume a longer-term, well-resourced effort

• Flexible process
  • Steps 1 and 2 often happen concurrently
  • Step 5 should happen as early as possible

Sourced with modifications from DOE 2010
Energy Justice

- **Procedural justice**: Involving an inclusive range of stakeholders meaningfully in decision-making.
- **Distributive justice**: Sharing the burdens and benefits of the energy system, and treating those impacted by energy development fairly.
- **Recognition justice**: Identifying and addressing historical inequities.
- **Cosmopolitan justice**: Working beyond national boundaries.
- **Restorative justice**: Practicing the above principles to co-develop solutions that address and prevent injustices.
## Spectrum of Community Engagement

<table>
<thead>
<tr>
<th>Stance Towards Community</th>
<th>Ignore</th>
<th>Inform</th>
<th>Consult</th>
<th>Involve</th>
<th>Collaborate</th>
<th>Defer To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>Marginalization</td>
<td>Placation</td>
<td>Tokenization</td>
<td>Voice</td>
<td>Delegated Power</td>
<td>Community Ownership</td>
</tr>
<tr>
<td>Community Engagement Goals</td>
<td>Deny access to decision-making processes</td>
<td>Provides the community with relevant information</td>
<td>Gather input from the community</td>
<td>Ensure community needs and assets are integrated into process &amp; inform planning</td>
<td>Ensure community capacity to play a leadership role in implementation of decisions</td>
<td>Foster democratic participation and equity through community-driven decision making. Bridge divide between community &amp; governance</td>
</tr>
<tr>
<td>Message to Community</td>
<td>Your voice, needs &amp; interest do not matter</td>
<td>We will keep you informed</td>
<td>We care what you think</td>
<td>You are making us think, (and therefore act) differently about the issue</td>
<td>Your leadership and expertise are critical to how we address the issue</td>
<td>It’s time to unlock collective power and capacity for transformative solutions</td>
</tr>
<tr>
<td>Activities</td>
<td>Closed door meeting</td>
<td>Fact sheets</td>
<td>Public Comment</td>
<td>Community organizing &amp; advocacy</td>
<td>MOUs with Community-based organizations</td>
<td>Community-driven planning</td>
</tr>
<tr>
<td></td>
<td>Misinformation</td>
<td>Open Houses Presentations</td>
<td>Focus Groups</td>
<td>House meetings</td>
<td>Community organizing</td>
<td>Consensus building</td>
</tr>
<tr>
<td></td>
<td>Systematic</td>
<td>Billboards Videos</td>
<td>Community Forums</td>
<td>Interactive workshops</td>
<td>Citizen advisory committees</td>
<td>Participation action research</td>
</tr>
<tr>
<td>Resource Allocation Ratios</td>
<td>100% Systems Admin</td>
<td>70-90% Systems Admin</td>
<td>60-80% Systems Admin</td>
<td>50-60% Systems Admin</td>
<td>20-50% Systems Admin</td>
<td>80-100% Community partners and community-driven processes ideally generate new value and resources that can be invested in solutions</td>
</tr>
<tr>
<td></td>
<td>10-30% Promotions and Publicity</td>
<td>20-40% Consultation Activities</td>
<td>40-50% Community Involvement</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Figure 3. Spectrum of Community Engagement to Ownership (adapted with permission from Rosa González at Facilitating Power 2020)
NREL’s Role

Because we receive public funding, we must remain **third-party neutral**. This means that we are bound by law to refrain from making recommendations for the communities we work with. **This could be seen as lobbying, which is prohibited by federal law and many state statutes.**

We provide **decision** support—not decisions.

*For more information, see 31 U.S.C. 1352; P. L. 101-121; National Conference of State Legislatures 2021; and U.S. Department of Health and Human Services 2019*
5 Best Practices in Community Energy Planning
Do your homework in preparation for community interactions

What?
• Understand as much of the community context as you can before and during interactions

Why?
• Enables you to ask questions, recognize the differences and unique needs across stakeholders, build trust, and ultimately generate context-sensitive options for a community
1. Do your homework in preparation for community interactions

How?

• Research the community’s **energy context**
• Look for important cultural differences—between you and the community and between different community groups
  • Which phrases and customs are appropriate?
• Conduct stakeholder mapping
  • What **expertise** exists in the community?
  • Is there a community member or entity that can execute the energy plan?
  • What is within a community’s authority to implement?
  • Whose **voices are missing** from these conversations?

Can’t find answers to these questions ahead of time? “Just ask!”
Do your homework in preparation for community interactions

How?

• Determine the community’s structure
  • What type of utility do they have?
  • What’s the nature of the relationship between the state and local governments?
  • Do they have any existing community plans?

- **Comprehensive or general plan**
  Guides land-use planning and infrastructure development

- **Climate action plan**
  Catalogues local sources of emissions and outlines reduction goals

- **Sustainability plan**
  Addresses environmental, economic, and social goals

- **Racial equity plan**
  Outlines goals and processes for ending racial disparities; may include environmental, transportation, and development goals
Be humble, authentic, and honest in your interactions with community members

What?

• Be up-front
  • About yourself & your knowledge
  • About NREL & our capabilities

Why?

• Helps to **build trust** between NREL and community members
Be humble, authentic, and honest in your interactions with community members

How?

• **Listen more than you speak** & come to the table as a learner
  • How can we better understand the community?

• Acknowledge your expertise and the **expertise of community members**
  • What gaps in your knowledge can the community fill?

• **Don’t overpromise**—be straightforward about what the community can expect from the process
  • What types of data and analysis can NREL provide for the community?
  • What can NREL *not* provide to the community?
  • What problems can our data help the community solve?

“If you’re not sure you can offer assistance, don’t make it seem certain; as soon as you say, ‘I think we can help you out,’ you’re overpromising if you aren’t sure, and trust can be damaged.”
Respect community agency in every step of the process

What?
• Center the community’s needs and goals
• Co-develop solutions with the community

Why?
• Ensures that the community’s needs are prioritized
• Co-developed solutions improve outcomes, build trust, & help to increase buy-in from community members

“We should constantly keep in mind whether the process and what we’re saying adds to or takes away from community agency.”

(Beierle 2002; Bidwell 2016; Chief, Meadow, & Whyte 2016; Gross 2007; Liebe, Bartczak, & Meyerhoff 2017)
Respect community agency in every step of the process

How?

- Let the community lead the way
  - How can we frame the work as a **partnership**?
  - How will we include community members in every step of the process?
  - What are the community’s needs and goals, from their perspective?
- Build agency
  - What **capacities** can we help build in the community?
  - Do community members want training on how to use NREL’s tools?

Questions that communities might have about energy planning:
- How can we engage our community **stakeholders** to participate in a clean energy transition?
- How can we bring **high quality jobs** to our lower-income communities through our energy transition?
- How can we engage our vulnerable community members in transportation electrification?
- Where should we site renewable energy projects to have the greatest **resilience** benefits for our community?
- How are we going to **pay** for energy transitions? How do we **finance** specific energy projects? What are available **funding** sources?
- How much could my community’s businesses reduce consumption through **energy efficiency**?

Illustration by Nicole Leon, NREL
Respect community agency in every step of the process

How?

• Consider power and expertise
  • How can we level the playing field?
  • How can we position community members as leaders and acknowledge community expertise?
  • How can we equalize and broaden power across the stakeholders?
  • What are our common goals?

Using a community-centered approach helps to balance power and promote community expertise. A neighborhood planning process in Ontario, for instance, began with a community-led tour of the neighborhood, which positioned community members as leaders with knowledge critical for the success of the project (Nasca, Changfoot, & Hill 2019).
Meet the community where they are

What?
- Make participation as easy as possible for community members
- Be flexible and develop a shared understanding of key energy and community terms and concepts across NREL and community stakeholders

Why?
- Successfully co-developing solutions requires an alignment of knowledge and goals
- No two communities are the same—successful processes will look different across different communities
Meet the community where they are

How?

• Build knowledge
  • What information do community members need to meaningfully participate in the planning process?
  • Where can we build in time for the community to ask questions? (Build in plenty of time and don’t be afraid of silence!)

• Tailor message delivery to community’s goals
  • What do community members find most important?
  • How can the data and solutions be presented in a way that prioritizes the community’s goals?

“Try, ‘I’m going to give everyone 1 minute to think about this before we discuss,’ to help people not feel awkward about the silence.”
4 Meet the community where they are

How?

- Meet community members where they are—literally—to make participation as easy as possible
  - How will we provide compensation to under-resourced community members for contributing their expertise?
  - What meeting times and locations are most accessible to community members?
  - What other considerations might make participation easier? (Childcare? Food?)
Democratize participation

What?

• Work to address barriers to participation (internet access, transportation) with creative solutions like asynchronous preparation and input (polling, pre-read materials), enabling phone participation, and holding meetings in accessible community spaces

• Virtual spaces bring challenges, but there are opportunities to leverage existing virtual capabilities to democratize participation

Why?

• Making participation easier can yield a more equitable processes
Democratize participation

How?

- In some communities, video calls might be challenging, so offer support to make participation easier. Consider:
  - Low-bandwidth options, such as allowing participants to join via phone or streaming recorded presentations and hosting phone call question-and-answer sessions

Be mindful! Recorded meetings can result in lower levels of participation because community members could be concerned about attribution. Consider recording presentations and not discussions.

“I like to have the community manage the video calls. If they decide to record the calls, they have the recordings—not me.”
Democratize participation

How?

• Hold shorter, more frequent meetings than you would in an in-person setting
• Use rapport-building and facilitation techniques, such as introductions and breakout rooms
  • Whose voices are most likely to be heard during meetings?
  • How can other voices be included and amplified in virtual and in-person environments?

“Organizing a series of virtual, 1- to 2-hour meetings, every 2 weeks for several months worked well.”
Summary

1. **Do your homework** and build a historical, cultural, social, and structural understanding of the community.

2. **Be humble, authentic, and honest** by listening more than you talk, acknowledging your expertise and the expertise of community members, and being straightforward about what they can expect from the process.

3. **Respect community agency** by co-developing solutions and leveling the playing field.

4. **Meet the community where they are**, both figuratively and literally, by making participation as easy as possible.

5. **Democratize participation** and leverage virtual and asynchronous meeting spaces.
Find the full & published best practices in community energy planning:
https://www.nrel.gov/docs/fy22osti/82937.pdf

JISEA—Joint Institute for Strategic Energy Analysis

Q&A

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