



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

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| Megan Day | Sustainable Communities Catalyzer PI |
| Liz Ross | Sustainable Communities Catalyzer Intern |
| Gail Mosey | Senior Researcher, Land Reuse & Arctic Energy Solutions |
| Sherry Stout | State, Local, Tribal Laboratory Program Manager |
| Alison Holm | Project Leader, Urban and Regional Planning |
| Tony Jimenez | Researcher, Market Analysis |
| Sara Farrar | Senior Project Leader |



Find the full best practices report:
<https://www.nrel.gov/docs/fy22osti/82937.pdf>



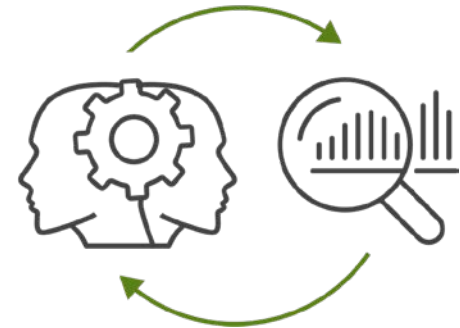
Purpose and Agenda

Purpose of this training:

To inform and enhance NREL's and other's capabilities in community energy planning

Agenda:

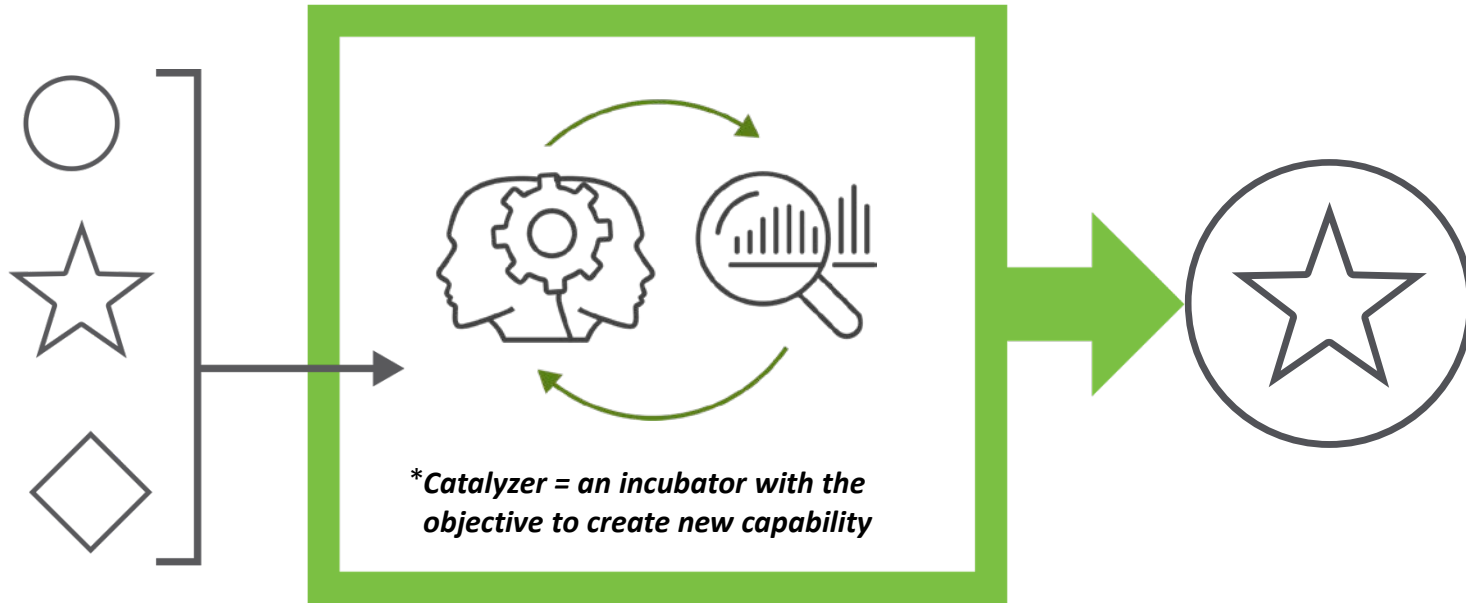
- 12:00-12:05 JISEA's Sustainable Communities Catalyzer
- 12:05-12:20 Definitions & concepts
- 12:20-1:00 Five best practices in community energy planning
- 1:00-1:30 Q&A



JISEA's Sustainable Communities Catalyzer

JISEA Catalyzer Vision

Structured crosscutting energy analysis catalyzers* with time-limited topics to expand NREL critical objectives/goals and develop new strategic capabilities



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 Need for Community Energy Planning Best Practices



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 Mayors for Climate (2022)

100%

Clean Energy Goals



180+ US cities,
10 counties, 8 states, DC,
Puerto Rico



Local Governments
for Sustainability



GLOBAL COVENANT
of MAYORS for
CLIMATE & ENERGY

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>

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

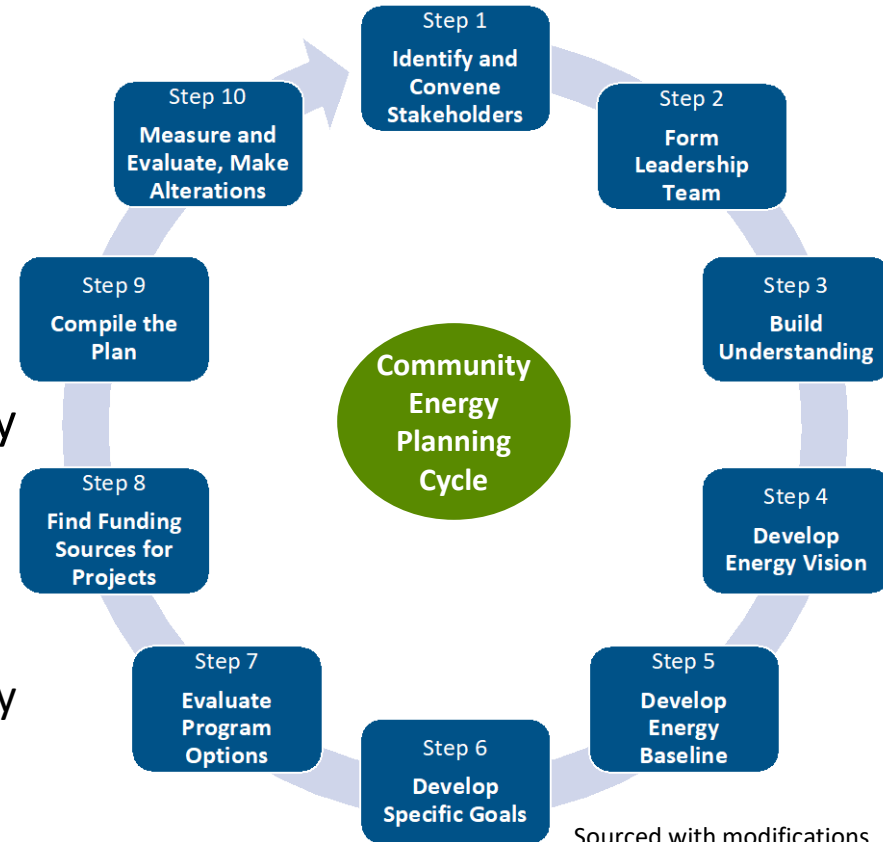


Energy Planning



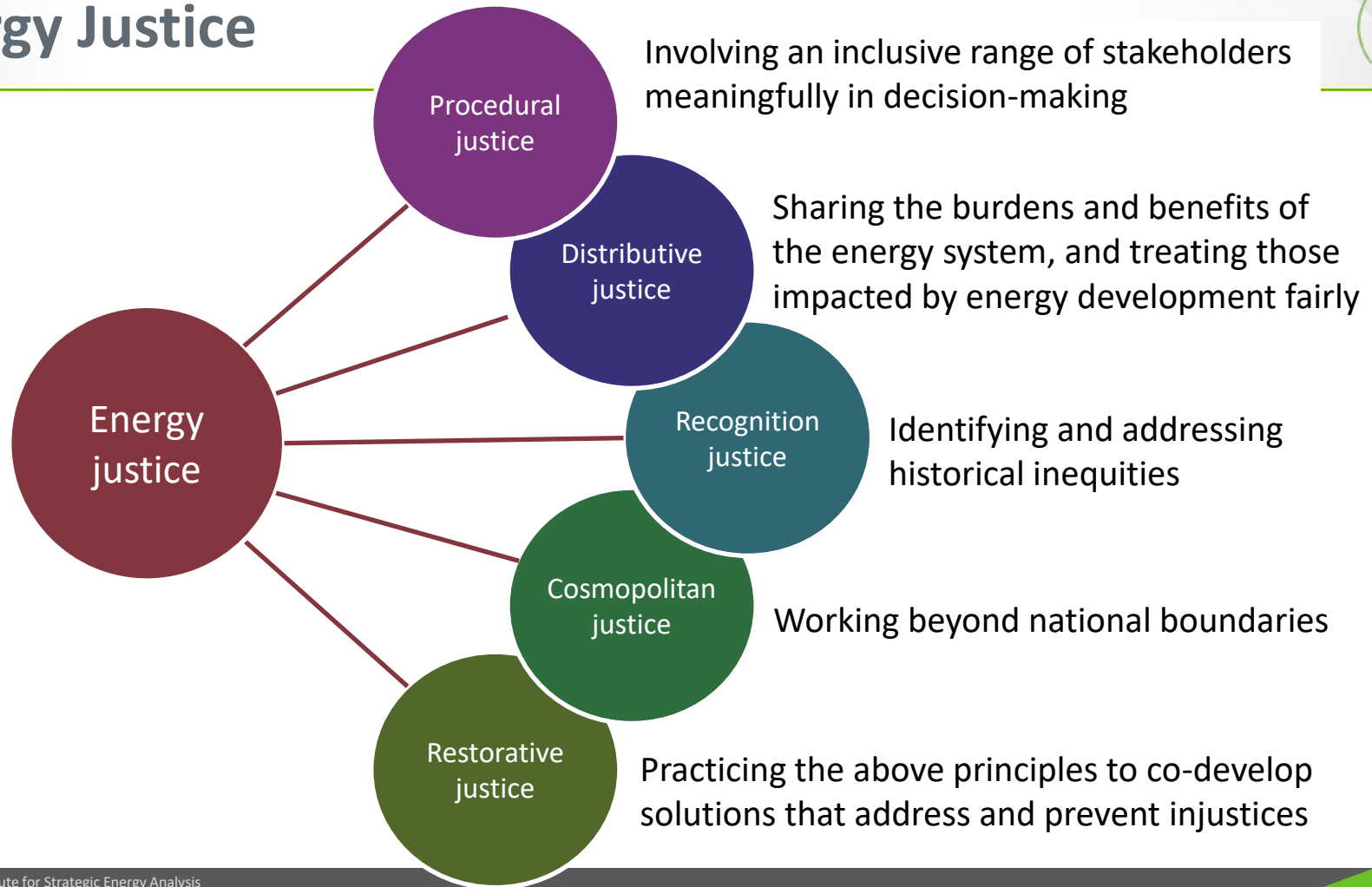
Community energy planning:

- 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

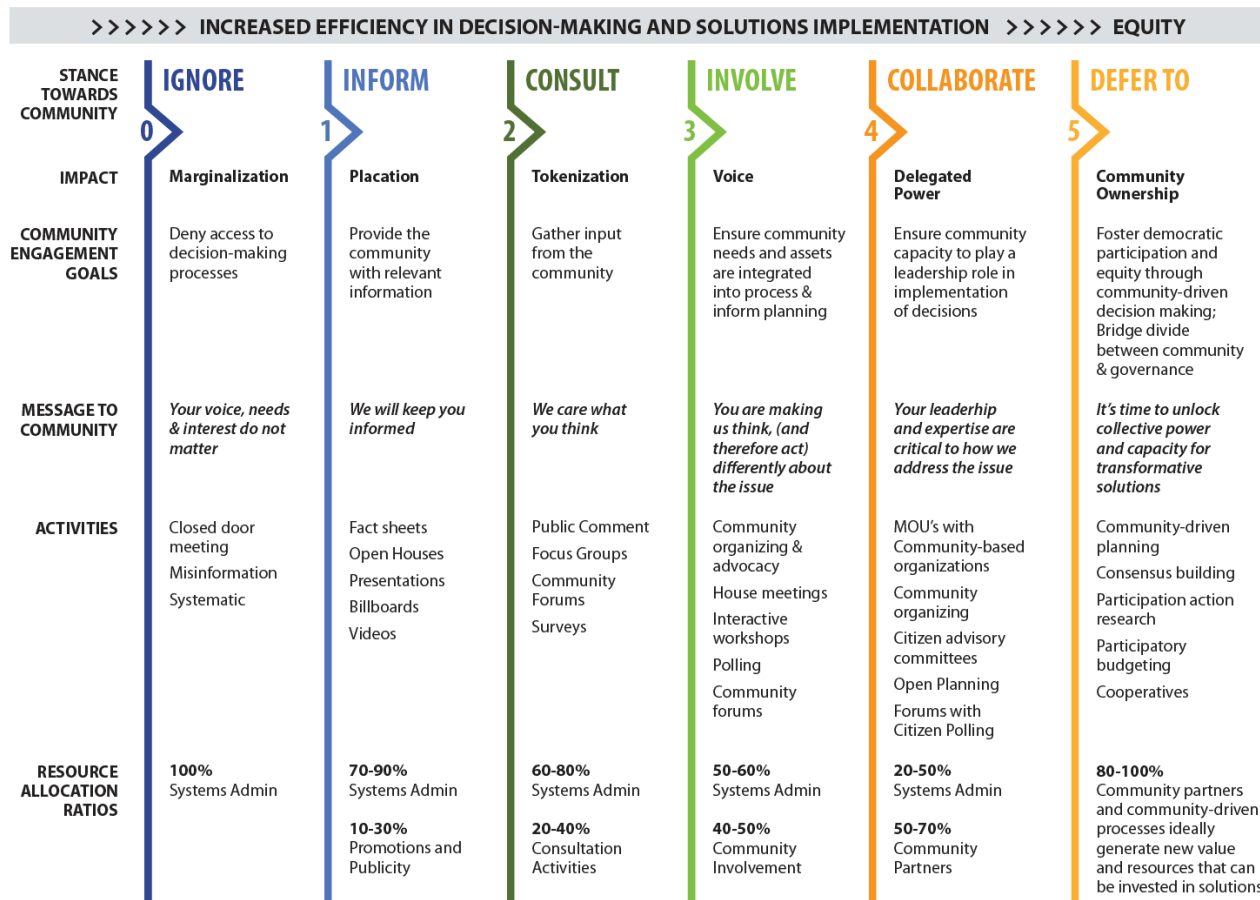


Sourced with modifications from DOE 2010

Energy Justice



Spectrum of Community Engagement





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

1 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



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!"

1 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

2

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

2

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.”



3 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.”



3 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:



Our community is interested in renewable energy, energy efficiency, electric mobility, energy justice... **where do we start?**



How can we engage our **vulnerable community members** in **transportation** electrification?



How are we going to **pay** for energy transitions? How do we **finance** specific energy projects? What are available **funding** sources?



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?



Where should we site renewable energy projects to have the greatest **resilience** benefits for our community?



How much could my community's businesses reduce consumption through **energy efficiency**?

Illustration by Nicole Leon, NREL



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).



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



4

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.”



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?)

5 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

5 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."



5 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>

Q&A

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