



Acadia
Center

Advancing the Clean EnergyFuture

RESPECT: Reforming Energy System Planning for Equity and Climate Transformation

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Webinar: Tuesday, Nov. 16, 2021

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WHO IS ACADIA CENTER?



MISSION

Acadia Center's mission is to advance bold, effective, and equitable clean energy solutions for a livable climate and a stronger, more equitable economy.

PROGRAMS

Acadia Center focuses on six areas of climate and clean energy, within which we prioritize consumer benefits, public health, economic growth, and equitable distribution of benefits:

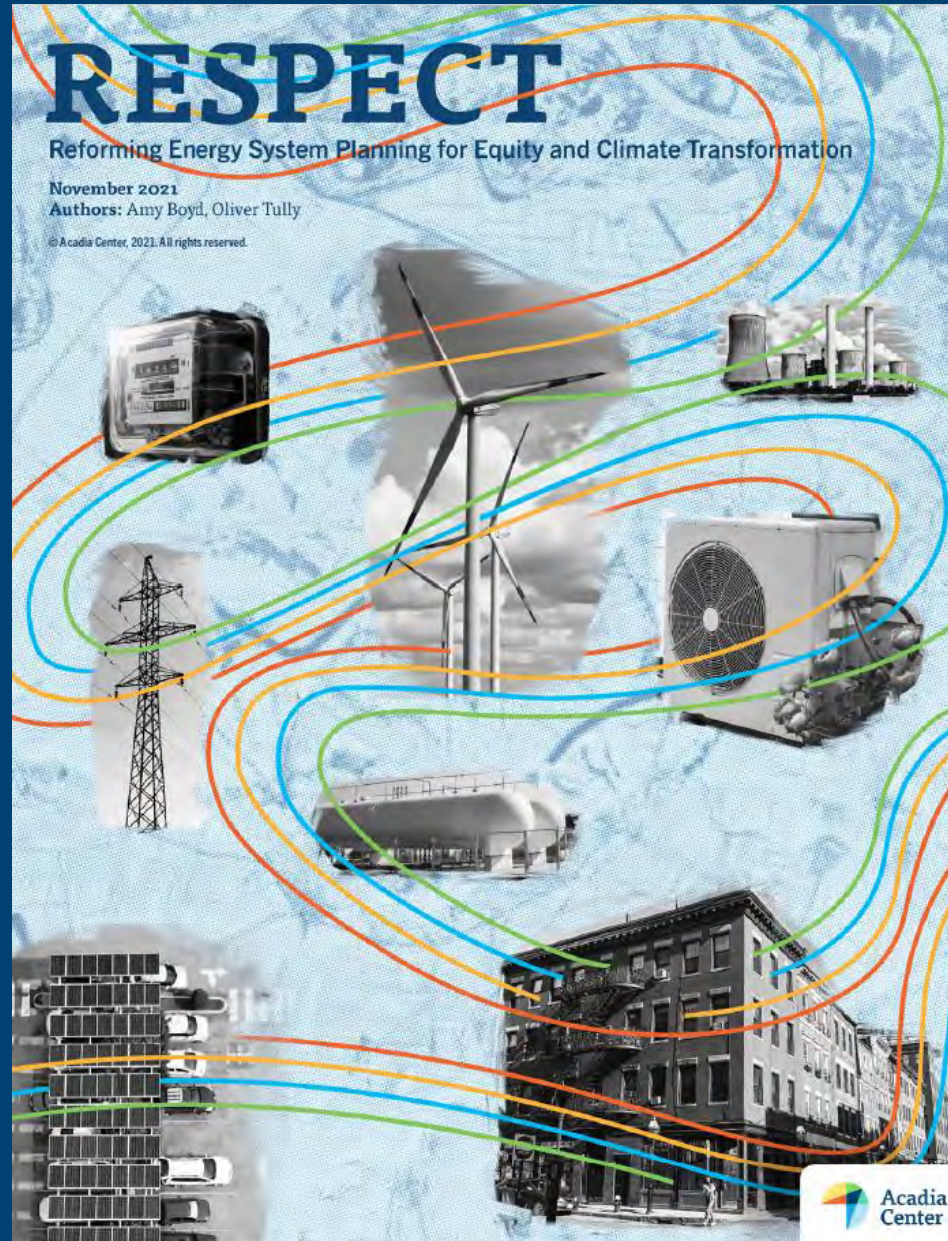
Next Generation Energy Efficiency: Make our Buildings Efficient, Healthy, and Climate Safe
Beyond Gas: Phasing Out Our Dependence on Fossil Fuels
Utility Innovation: Reform Utilities and Energy Systems
Transportation Climate and Equity Investments
Clean Energy and Climate Pathways
Public Engagement and Communications

SUPPORT

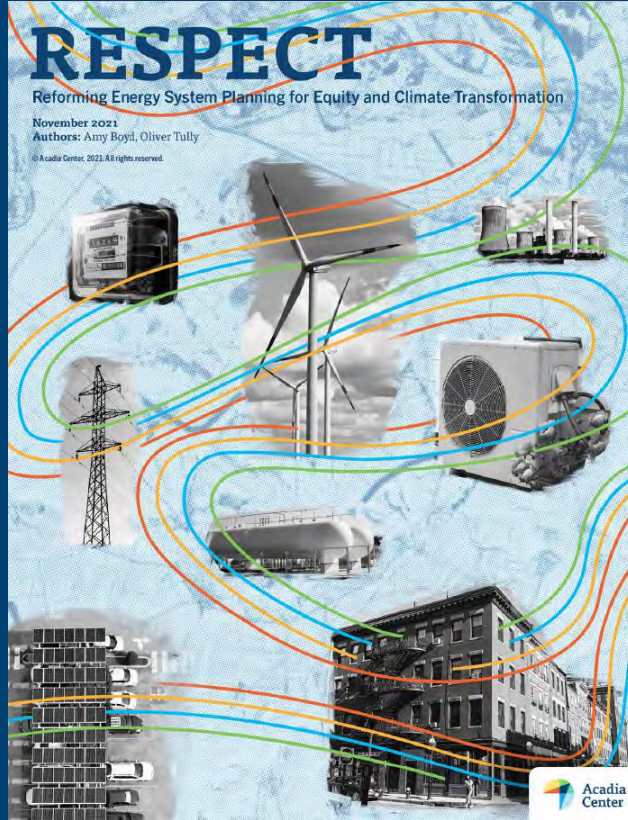
Acadia Center is funded by foundation grants and individual donations. It does not accept corporate or government funding.

OUTLINE

- What is RESPECT?
- Three key problems
- Two fundamental reforms
- RESPECT in practice
- Q&A



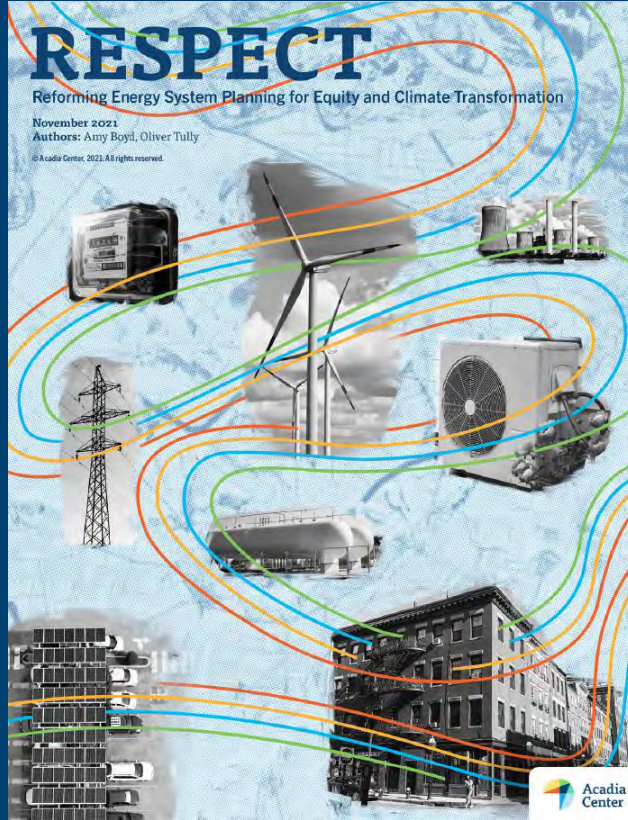
WHAT IS RESPECT?



PROPOSALS:

- Address climate crisis and environmental justice.
- Address the inherent conflict of interests in utility planning processes.
- Spark discussion and innovation.

WHAT IS RESPECT?

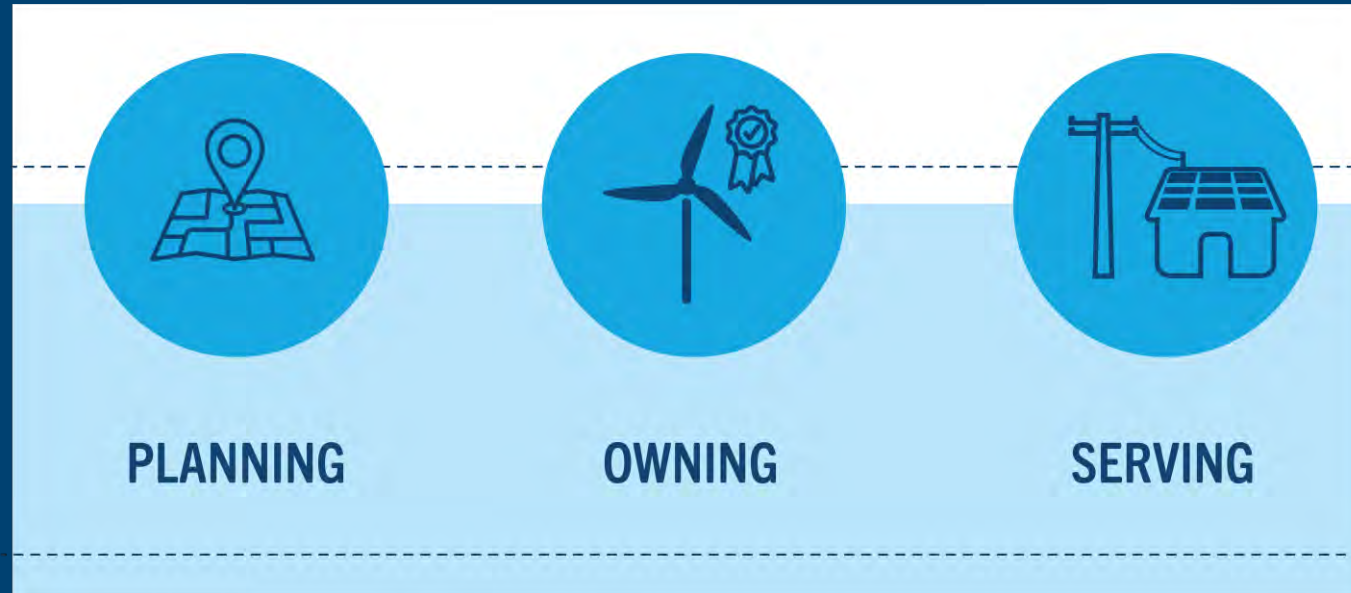


OUTCOMES:

- Help align system planning with climate, equity, environmental justice, and clean energy requirements.
- Clarify the role of utilities and reduce risk for investments.
- Maximize benefits to consumers and the grid by enabling non-biased planning.

THE SYSTEM IS BROKEN

The regulatory system currently gives three powerful roles to utilities.



This creates incentives and a structure that put at least two roles in conflict and ignores public policy goals around health, climate, and justice.



HOW DOES UTILITY PLANNING WORK NOW?

Electric and gas utilities conduct planning that forecasts future demand and determine infrastructure required to meet demand.

- Siloed
- Short term planning horizons
- Ignores climate needs
- Allowed returns on capital expenses are between 8-11%
- Limited oversight

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A photograph of several offshore wind turbines in the ocean at sunset. The sky is a mix of orange, red, and blue, and the water is dark with some whitecaps. The turbines are silhouetted against the bright sky.

UTILITY PLANNING IS INSUFFICIENT TO MEET THE CLIMATE CHALLENGE

RESPECT addresses three key problems inherent to utility distribution planning:

- 1) Utility planning occurs in silos.
- 2) Distribution planning will not advance equity and environmental justice if these are not a priority for regulators and utilities.
- 3) Utilities have a financial interest in the outcomes of their planning decisions, creating a significant conflict of interest.



PROBLEM 1: PLANNING SILOS CAUSE OVERSPENDING AND MORE CLIMATE POLLUTION

- Silos (e.g. by geography, fuel, corporate affiliate)
- Short-term horizons mask real needs
- Over-estimates demand and overbuilding infrastructure
- Prioritizes cheapest option, ignoring climate and health
- Needlessly costly for ratepayers without addressing overburdened communities



PROBLEM 2: CURRENT PLANNING PROCESSES IGNORE EQUITY AND ENVIRONMENTAL JUSTICE

- Equity, environmental justice, and climate impacts ignored
- Uneven distribution of environmental hazards
- People who can least afford expensive, polluting energy will be stuck paying for stranded fossil fuel costs

A large black pipe is being laid in a deep trench in a forest. The pipe runs along the length of the trench, which is lined with brown soil. Tall green trees are visible in the background, and the sky is a pale blue. The pipe has a ribbed texture and is surrounded by a layer of sand or gravel.

PROBLEM 3: UTILITY PLANNING SUFFERS FROM SIGNIFICANT CONFLICTS OF INTEREST

- Affects consumers, state policy, and the utility itself, **but driven primarily by financial interests**.
- Existing regulation **incentivizes** polluting investments.
- Performance-based regulation (PBR) has helped along the margins but is **not working** at speed and scale needed.
- Without key reforms, planning processes will not treat all **viable solutions** on a level playing field.



WHAT DOES THIS MEAN FOR REAL COMMUNITIES?

Imagine a town that faces two key energy challenges:

- 1) A gas pipeline has been leaking methane for years.
- 2) Aging electric transformers are causing concerns over power reliability and preventing clean energy investments, e.g. rooftop solar, electrification of building heating, or electrifying the diesel buses that idle at local stops.



WHAT DOES THIS MEAN FOR REAL COMMUNITIES?

Regulatory Silos:

- Gas utility upgrades leaking pipeline. Ratepayers locked into paying for fossil fuels for decades of depreciation.

Ignoring Climate and Environmental Justice:

- Electric utility upgrades the transformer but cannot recover for one large enough to allow future full electrification of local heating and transportation.

Conflicts of Interest:

- Ratepayers on the hook for multiple upgrades, needed as more end uses are electrified, while also paying high gas bills.



WHAT DOES THIS MEAN FOR REAL COMMUNITIES?

Bottom Line:

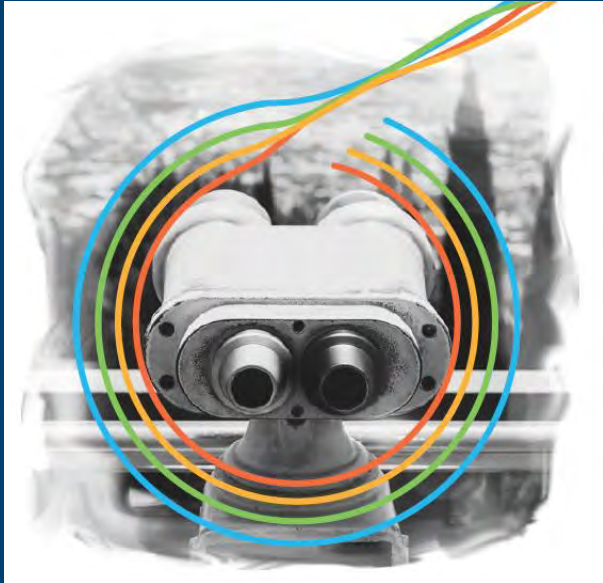
- There is no space for a comprehensive look at how the gas and electric systems are interdependent; how clean energy options could replace fossil gas, or what solutions might be best for the community and their needs.

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RESPECT OFFERS TWO KEY REFORMS:



- 01 Conduct “all-in” energy system planning** that considers supply and demand-side resources; customers’ energy, capacity, and thermal needs; and climate requirements and environmental justice impacts for all fuels across the state.
- 02 Create statewide planning entities** that can look for solutions beyond utility boundaries and across fuels, leaving traditional utilities free to focus their efforts on business development in alignment with climate and equity mandates.

REFORM 1: COMPREHENSIVE, INDEPENDENT PLANNING

- Centralized/state-wide
- Stakeholder input
- Incorporates all energy concerns
- Aligns with state climate and environmental justice policies
- Provides transition for fossil fuel workers
- Long-term planning for multiple needs vs. one-off solutions

REFORM 1: COMPREHENSIVE, INDEPENDENT PLANNING

Comprehensive planning *could* consider:

- Strategic electrification of fossil fuel heating & transportation.
- Preferentially closing fossil fuel facilities in EJ neighborhoods.
- Creating flexible demand to respond to intermittent renewables.
- Planning for distributed energy resources and streamlined interconnection.
- Making best use of data from smart meters and smart grid.

REFORM 1: COMPREHENSIVE, INDEPENDENT PLANNING

Key questions to be answered in partnership with climate and energy justice experts include:

- How to prioritize inclusion of voices that are ignored today.
- Key considerations and criteria for planning that puts environmental justice at the center.

REFORM 2: SEPARATE PLANNERS AND OWNERS

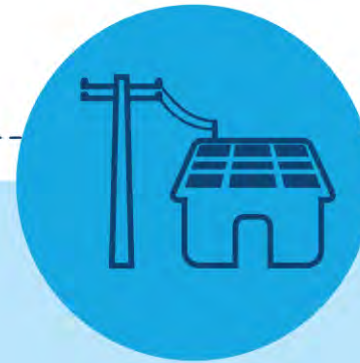
Regulatory system gives three powerful roles to utilities,
but is that the best way?



1. THE PLANNING
ENTITY



2. THE OWNING
ENTITY



3. THE NATURAL
MONOPOLY ENTITY

REFORM 2: SEPARATE PLANNERS AND OWNERS

Planning Entity:

- Mitigates and equitably adapt to the climate crisis
- Prioritizes reliability, transparency, public review and optimizing service
- Creates comprehensive planning guided by state policy
- Identifies grid needs and solutions beyond utility boundaries
 - Some are best met by natural monopoly infrastructure
 - Others can be defined and opened to the market
- Runs auctions; uses societal values as criteria; selects winners.
- Could take multiple forms.

REFORM 2: SEPARATE PLANNERS AND OWNERS

Owning Entities:

- The winners of the Planning Entity's competitive procurement.
- Could be investor- or community-owned utility (or affiliate), third-party developer, aggregator, etc.
- Build, design, own, and operate infrastructure and DER assets.
- Innovation within guardrails of neutral, unbiased planning.

REFORM 2: SEPARATE PLANNERS AND OWNERS

Natural Monopoly Entity:

- Existing distribution companies.
- Operates legacy wires/pipes, billing system, and customer interface.
- Runs dispatch of the procured resources and non-wires alternatives.
- Performance-based regulation is still important to encourage desired outcomes.

Integrating other energy players:

- Energy efficiency administrators.
- Competitive energy suppliers, municipal aggregators.

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WHAT DOES RESPECT MEAN FOR REAL COMMUNITIES?

- Planning Entity identifies neighborhood as a priority for electrification: EJ characteristics, age of infrastructure, potential for emissions reductions.
- Planning Entity works with community to identify scope of other issues to address.
- Issues an RFP, inviting projects to weatherize and electrify buildings, install fast chargers for electric buses, and build rooftop solar and storage.
- Combined package leverages multiple funding sources (e.g. federal tax credits, state efficiency incentives, and clean tech grants), costing ratepayers less.
- Natural Monopoly Entity decommissions the gas pipe (lowering its O&M costs), upgrades the electric transformers once, dispatches local DER, and continues to provide electricity to the neighborhood.



WHAT DOES RESPECT MEAN FOR REAL COMMUNITIES?

Bottom line:

- Community gets clean energy future that they helped plan.
- Owning Entities get new business opportunities and create jobs.
- Utility provides safe, reliable service to customers.
- By separating the entity that conducts planning from the entities that own the grid, RESPECT avoids conflicts of interest, clarifies roles between stakeholders, reduces risk for utilities, and maximizes consumer value.

BETTER OUTCOMES FOR EVERYONE

STAKEHOLDER:

Consumers →

Environmental Justice Communities
& Other Marginalized Voices

Utilities

Regulators

BENEFIT:

- Reduction in overly costly investments that consumers are on the hook for.
- Greater stakeholder input in planning decisions.

BETTER OUTCOMES FOR EVERYONE

STAKEHOLDER:

Consumers

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& Other Marginalized Voices

Utilities

Regulators



BENEFIT:

- Priorities and concerns are more meaningfully included and addressed through comprehensive, independent planning.
- Explicitly part of planning mandate to consider their viewpoints.

BETTER OUTCOMES FOR EVERYONE

STAKEHOLDER:

Consumers

Environmental Justice Communities
& Other Marginalized Voices

Utilities

Regulators



BENEFIT:

- Clarified scope of best opportunities to go after innovation and profits.
- Coordinated planning increases the likelihood of regulatory approval and decreases utilities' business risks.

BETTER OUTCOMES FOR EVERYONE

STAKEHOLDER:

Consumers

Environmental Justice Communities
& Other Marginalized Voices

Utilities

Regulators



BENEFIT:

- Greater oversight over planning and ability to set criteria that aligns with public policy goals, including climate, health, equity, environmental justice.
- Reduced utility conflicts of interest, better positioning utilities to work in the public interest.
- Difficult decisions about how to innovate within existing statutes off their dockets.

NEXT STEPS

- Education and raising awareness on problems, solutions, & RESPECT
- Conduct additional webinars
- Build coalition support for reforms
- Future discussions with stakeholders on how RESPECT could be moved forward in specific venues.
- Drafting legislation
- Incorporating feedback and input
 - **Please spread the report/FAQs!**
 - Send us your thoughts and questions!



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