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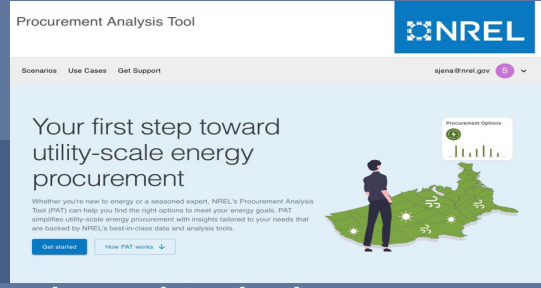
*Learn more at:*
*https://pat.openei.org/*

# Procurement Analysis Tool (PAT)

## Your first step toward utility-scale energy procurement!




NREL's Procurement Analysis Tool (PAT) is a web-based platform designed to help non-residential users—including state and local governments, commercial, industrial, and higher education —evaluate utility-scale energy opportunities. The tool helps users align these options with their specific objectives, such as energy targets, cost considerations, geographic location, and other goals.

## THE PROBLEM

There are few tools available to help local and state governments evaluate off-site electricity procurement options. This makes it difficult to compare choices like PPAs or utility programs based on cost, emissions, and location—slowing progress toward energy and reliability goals.

## PROJECT GOALS

The Procurement Analysis Tool (PAT) is designed to empower organizations—especially public sector and non-residential users—to make informed decisions about large-scale electricity procurement. Through a secure, self-service portal, users input facility-level energy data to generate tailored recommendations for technologies such as solar, wind, and battery storage, along with procurement pathways like power purchase agreements and utility tariffs. By guiding users through a structured decision-making process, PAT helps align procurement strategies with organizational goals around cost, risk, location, and long-term energy planning.

## METHODS AND STRATEGIES N/A

| USERS | KEY OUTCOMES<br>Questions Answered by PAT |
|---|---|
| Government | What energy procurement options are available by location?<br>PAT shows options like PPAs or utility programs—are available in a user's location based on utility service areas and market structure. |
| Corporates | How do energy procurement options align with specific user objectives?<br>The tool matches energy options to user priorities like cost, targets, and technology preferences. |
| Utilities | Which resources are most cost-effective by location?<br>PAT identifies the most cost-effective technologies—like wind, solar, or storage—based on local resource potential and market data. |
| Research Org | How do different resources and procurement options compare in terms of cost and impact?<br>The tool compares costs across technologies and procurement models to support informed decisions. |

## PROJECT TEAM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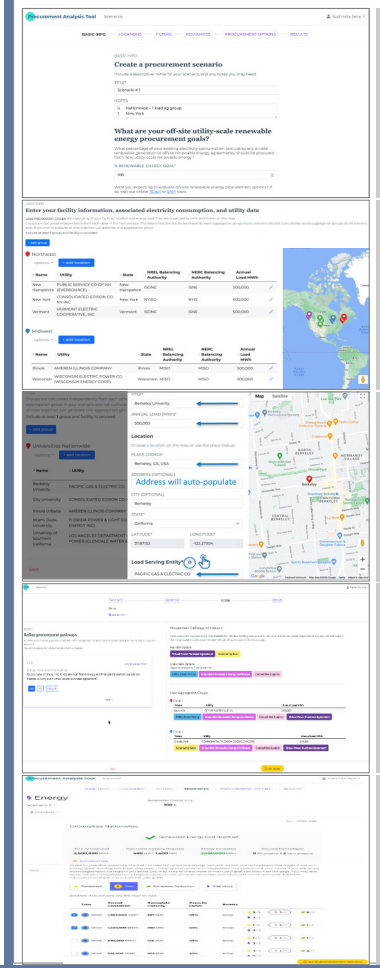
## How does PAT work?




### *Scenario Setup*

Users enter scenario title, energy goals (%) and any additional notes

### *Load Aggregation Groups*

Users' aggregate electricity load by region, type of facility and/or load size. Users input specific facilities' information such as annual load (MWh), address, and the utility / load serving entity

### *Refinement Based On User Preferences*

Users answer 6 questions about their procurement preferences and knowledge of the energy procurement process

### *Procurement Options*

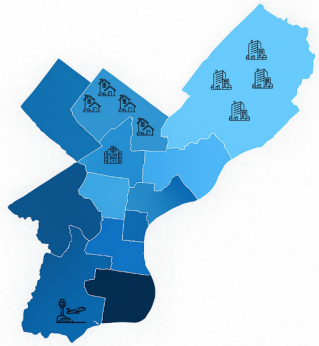
Procurement options such as utility tariffs, competitive suppliers, green pricing, unbundled RECs, distributed solar, PPAs based on the combination of user preferences and available offerings from the load serving entity

### *Resource Regions*

Select resource regions are optimized based on wholesale power markets, cost, emissions reduction, grid value or a combined score

## How can state / local governments leverage PAT?

### Inputs from State / Local Energy Planning Office



- Annual Energy Consumption
- Location information of different state and local institutions
- Planned Energy Mix
- Customizing options using filters
- Optimization criteria : cost / grid value / combination

### Benefits of Analyses Performed by PAT

By aggregating electricity demand across multiple city-operated sites, PAT helps municipalities identify joint procurement opportunities—enabling them to streamline energy purchasing, reduce administrative burden, and unlock cost savings through economies of scale.

PAT allows cities to compare off-site electricity supply scenarios tailored to their specific preferences and level of preparedness—factoring in procurement experience, risk tolerance, and siting constraints—so they can make informed decisions that align with their operational capacity and strategic goals.

PAT helps cities identify the most suitable energy resource—or combination of resources such as solar, wind, or solar-plus-storage—by evaluating local potential and optimizing for cost, grid value, or both, enabling more strategic and cost-effective energy planning.

PAT enables cities to evaluate and select the most suitable combination of available procurement options—such as power purchase agreements and tariffs—helping them align energy strategies with budget goals, policy objectives, and operational needs.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