



State and Local Planning for Energy (SLOPE) Platform

SLOPE provides a free, easy-to-use "one-stop shop" for clean energy-planning data. SLOPE is a State and Community Energy Programs (SCEP)-led collaboration between multiple U.S. Department of Energy (DOE) offices and the National Renewable Energy Laboratory (NREL).

As more state and local governments develop comprehensive energy plans, the adoption of clean energy technologies has become a focal point of many planning processes. Although extensive resources and data exist to help states, counties, cities, and regions identify opportunities to deploy these technologies, the dispersed, unintegrated, and sometimes inaccessible nature of this data makes it difficult for state and local governments to easily consider, compare, or fully capture the value of this information.

The State and Local Planning for Energy (SLOPE) Platform addresses this barrier by serving as a free, easy-to-use data visualization platform to support state and local clean-energy planning. Through the two tools housed on the platform, SLOPE integrates over 50 key data sets to enable users to explore the generation potential and levelized cost associated with renewable energy resources in their jurisdiction, the impacts of increased vehicle electrification, the savings potential associated with energy efficiency improvements, and more. SLOPE also illustrates the potential impacts of various clean energy strategies on energy consumption, emissions, and costs to help users prioritize pathways toward their clean energy goals.

Visualize Your Energy Future!

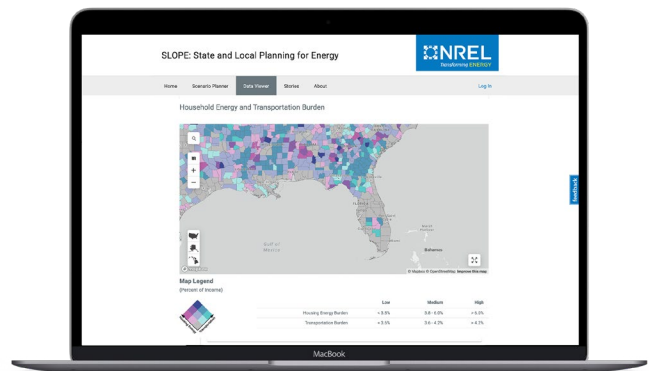
- **Prioritize** the most cost-effective options to meet your clean energy and climate goals
- **Access** energy data and create customized maps, charts, and scenario models that can be easily shared with key decision makers
- **Advance** equitable decision-making so all communities can benefit from clean energy transitions.

Two Powerful Tools To Support State and Local Governments' Planning Needs



SCENARIO PLANNER

Visualize and compare the impacts of different energy scenarios for your state or county's future energy consumption, CO₂, SO₂, and NO_x emissions, and system costs. The scenarios available reflect different clean energy strategies like energy efficiency and grid decarbonization, as well as vehicle and building electrification.



DATA VIEWER

Explore interactive maps and charts of energy efficiency, renewable energy, sustainable transportation, energy equity, energy cost data, and more at the state, county, city, and census tract levels.



SLOPE can help users answer questions in the following areas:

Equity

- Where in my county can energy programs, outreach, and investments be targeted to benefit households experiencing the highest housing and transportation energy burdens?
- Where could my county prioritize underserved or vulnerable populations with renewable energy or energy efficiency, or electric transportation investments?

Transportation

- What might electric vehicle adoption trends look like in the future, and what will be the new demands on the grid?

Energy Consumption

- How much electricity and natural gas is consumed in my jurisdiction?

Efficiency

- What is the energy bill savings potential of cost-effective efficiency measures for low-to-moderate income households in my county?

Renewables

- How much energy could be produced if my jurisdiction fully developed residential or commercial rooftop solar, and how does that compare to utility-scale solar potential?
- What are the lowest-cost renewable energy generation technologies in my state or county and how do they compare to fossil fuel costs?

Scenario Planner

- How do energy system costs, emissions, and consumption compare if our county focuses on building efficiency, transportation and building electrification, grid decarbonization, or a combination of approaches?
- What are reasonable goals and interim targets for vehicle electrification, renewable energy generation, or building efficiency in my jurisdiction?
- How might building and transportation electrification and grid decarbonization change my state or county's electricity consumption over time?



Photo by John De La Rosa, NREL 28048



ENERGY
EFFICIENCY



RENEWABLE
ENERGY



SUSTAINABLE
TRANSPORTATION



EQUITY

For More Information

To access SLOPE, visit:
maps.nrel.gov/slope.

For questions, please contact
slope@nrel.gov.

For additional resources related to energy data and hundreds of other resources to support the energy priorities of states, local governments, and K-12 school districts, visit the State and Local Solution Center: energy.gov/eere/slsc.

To receive monthly updates on the newest resources, news, and funding opportunities, please subscribe to our newsletter, the State and Local Spotlight: energy.gov/eere/slsc/subscribe.



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Transforming ENERGY