NEW ENERGY PLANNING TOOLS FROM NREL

As budgets shrink or are reallocated, planners can keep clean energy and sustainability plans moving forward with a suite of new, free tools from the National Renewable Energy Laboratory (NREL) and the U.S. Department of Energy.

SLOPE

Energy planners can identify clean energy economic development and job creation opportunities with the State and Local Planning for Energy (SLOPE) platform.[1] SLOPE helps state and local decision makers understand their opportunities and the potential for renewable energy generation, energy efficiency, and (coming soon) sustainable transportation.

SLOPE delivers localized population and electricity and natural gas consumption projections to help answer questions like: **What will my jurisdiction's future energy needs look like?**

Energy efficiency and renewable energy generation potential and projected energy costs by generation technology help answer questions like: **What are my options for meeting future energy needs with clean energy resources?**

The new State and Local Planning for Energy (SLOPE) platform

SLOPE is currently in a beta version, and we want to hear from you to shape its future. Contact us with questions or feedback on how SLOPE can help you find cost-effective options to meet clean energy goals at slope@nrel.gov.

State and Local Energy Profiles

NREL and the U.S. Department of Energy recently released a suite of new interactive data sets that deliver detailed information on building and transportation energy estimated for each U.S. city and county.
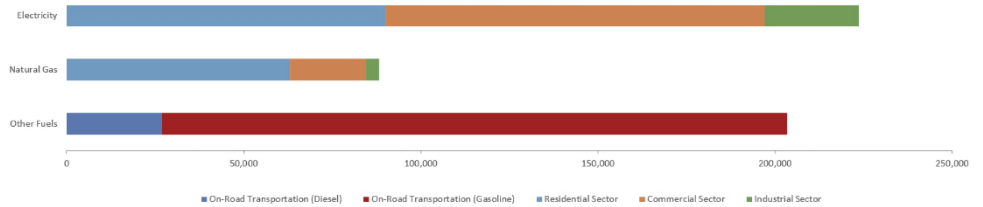
Renewable Procurement Options

The Renewable Electricity Procurement Options Data (RE-POD) helps cities and counties understand available options for renewable electricity procurement. RE-POD provides municipal franchise agreement expiration dates for 3,500 municipalities. Franchise agreements can provide a mechanism for clean energy negotiations between utilities and local jurisdictions.

[1] "State and Local Planning for Energy (SLOPE)," National Renewable Energy Laboratory, accessed May 14, 2020, https://gds.nrel.gov/slope.
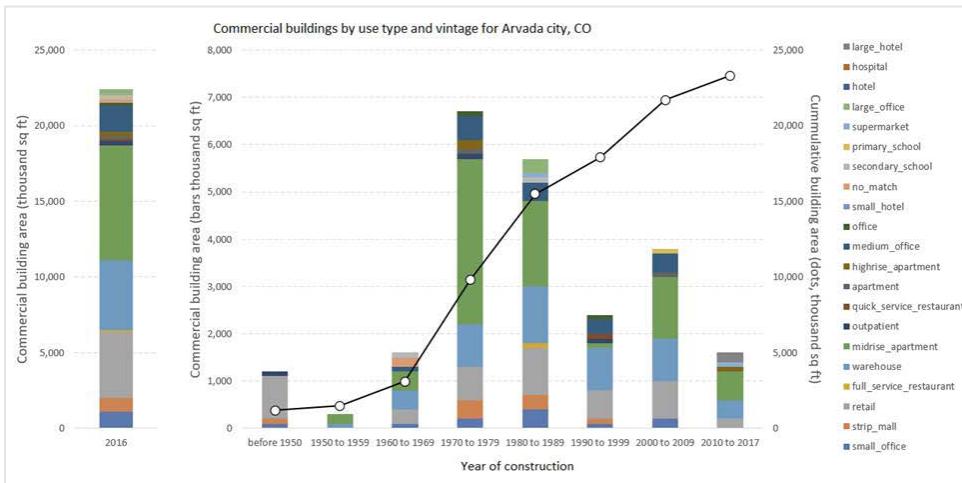
Energy Consumption and Expenditures

The City and County Energy Profiles include modeled electricity and natural gas consumption and expenditures, vehicle miles traveled (VMT), and on-road vehicle fuel consumption as well as an estimated emissions summary.[2]

Estimated Greenhouse Gas Emissions from Electricity, Natural Gas, and On-Road Fuel Consumption (metric tons CO2-equivalent) for Littleton city, CO for 2016

Modeled emissions for Littleton, Colorado (2016), from the SLOPE City and County Energy Profiles lookup table

Commercial buildings by use type and vintage for Arvada city, CO

Estimated commercial buildings by type and vintage in Arvada, Colorado, from the Commercial Buildings Inventory tool
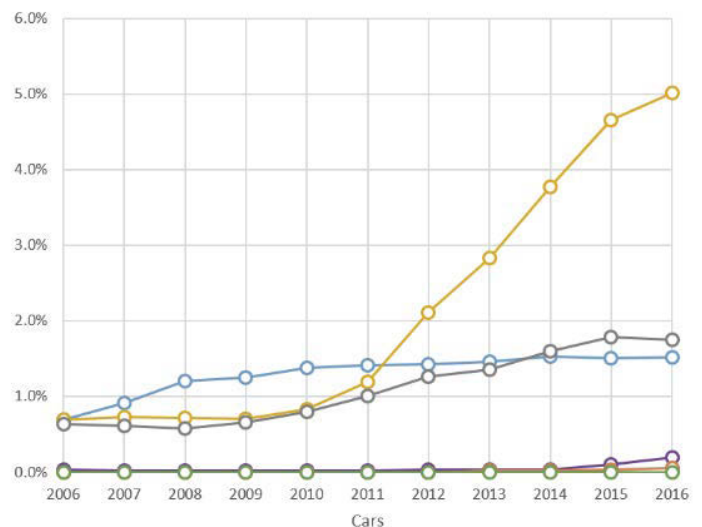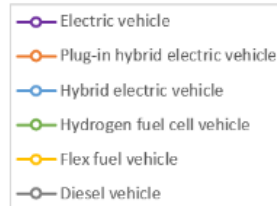
Commercial Building Stock

The City and County Commercial Building Inventory lookup table provides data on building type, vintage, and area for each U.S. city and county.

Vehicles by Fuel Type

The City and County Vehicle Inventories provide information on light-duty vehicle registrations by vehicle type (car versus truck), fuel type, and model year, showing the changes in adoption trends over time.

Percentage of light-duty cars by fuel type and vintage in Breckenridge, Colorado (2016) from the Vehicle Inventory tool

[2] State and Local Energy Profiles," OpenEI, last updated February 13, 2020, https://openei.org/wiki/StateAndLocalEnergyProfiles