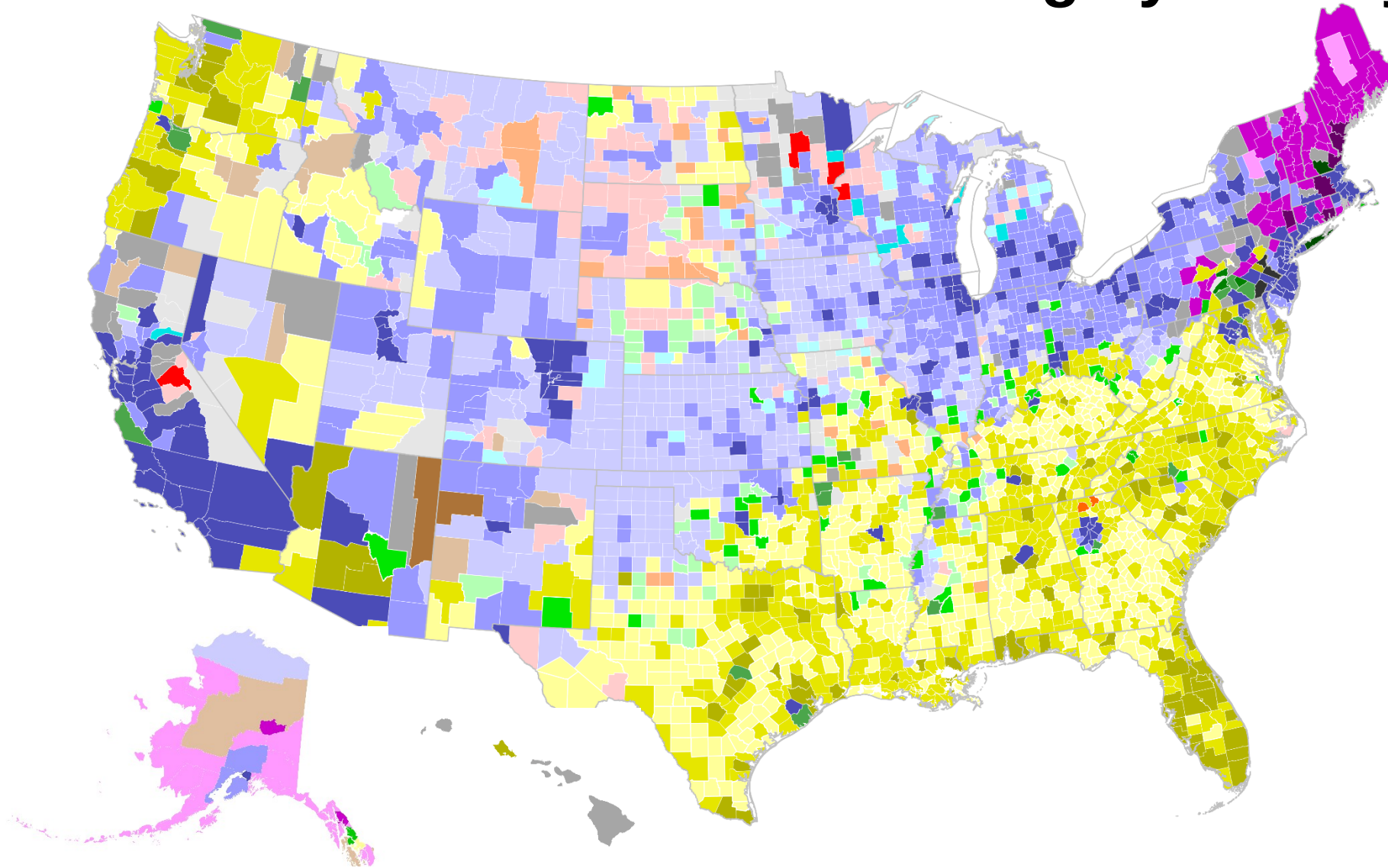


Chart of the Week #2024-04 **U.S. Residential Heating by County**

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U.S. Residential Heating by County



Number of County Dwellings	> 80k	10k to 80k	< 10k
Single Fuel Dominance			
Natural Gas			
Electricity			
Propane			
Heating Oil			
Wood			
Dual Fuel Dominance			
Gas + Electricity			
Gas + Propane			
Propane + Elec.			
Heating Oil + Natural Gas or + Propane or + Electricity			
No Dominant Heating Fuel			

Analysis based on 2022 U.S. Census Data

Energy Policy Research



U.S. Residential Heating by County



- The map shows the density, variability, and patterns of energy sources as they are used across the country.
- According to the data, in the fifty U.S. states and the District of Columbia, there are over 125 million dwellings in 3,150 counties or county-equivalent entities (parishes in Louisiana, in some cases independent cities such as St. Louis in Missouri). By number of dwellings, they range in size from 31 to over 3,340,000.
- Each of these counties or equivalent entities is shown color-coded by number of units and dominant heating energy source.
- By number of premises, the map classifies them into three categories: those whose residences number greater than 80 thousand; those that have between 10 and 80 thousand premises; and those that have less than 10 thousand dwellings.

U.S. Residential Heating by County

Patterns of energy-usage



- **Across most of the six New England states, heating oil is the dominant heating fuel.**
- **Along with the northwestern states of Oregon and Washington, electricity use stretches across a southeastern band from the Atlantic Coast to most of Texas.**
- **Natural gas dominates a similar band from Western Pennsylvania and New York State to the western counties of Utah.**
- **Urban areas such New York City, Los Angeles, San Francisco, Chicago, St. Louis, Minneapolis-St. Paul, and Atlanta rely on natural gas.**
- **For sparsely populated rural counties in places such as the Dakotas and Arizona where infrastructure such as pipelines or transmission lines are not cost-effective, wood and propane are the primary fuels.**

U.S. Residential Heating by County

Methodology



- An energy source is shown as dominant if more than 40% of the dwellings rely on this source for winter heating, and every other fuel makes up less than 40%. One example would be Kern County in California with over 274,000 units with natural gas heating 61% of the dwellings.
- A county is deemed to have dual fuel dominance when there are two energy sources supplying between 40% to 50% of fuel for winter heating; together the energy sources cover at least 80% of winter heating requirements. An example would be Benton County in Northwestern Arkansas which has 101,109 dwellings of which 46.9% are heated by natural gas and 42.1% by electricity.
- A special case is made for a small number of counties where heating oil and either natural gas, electricity, or propane is the other source to make up over 80% of the resources used for winter heating. They are shown in shades of Kelly green.
- Last, there are a small number of counties, mostly rural, where there are no dominant heating sources. An example would be Sanders County in Northwestern Montana. With 5,390 number of dwellings, wood is used in 35.3% of the dwellings, propane in 33.2%, and electricity in 22.7%.

U.S. Residential Heating by County



- This slide deck is available at: <https://eprinc.org/chart-of-the-week/>
- For more information on this chart, please contact Max Pyziur (maxp@eprinc.org).