

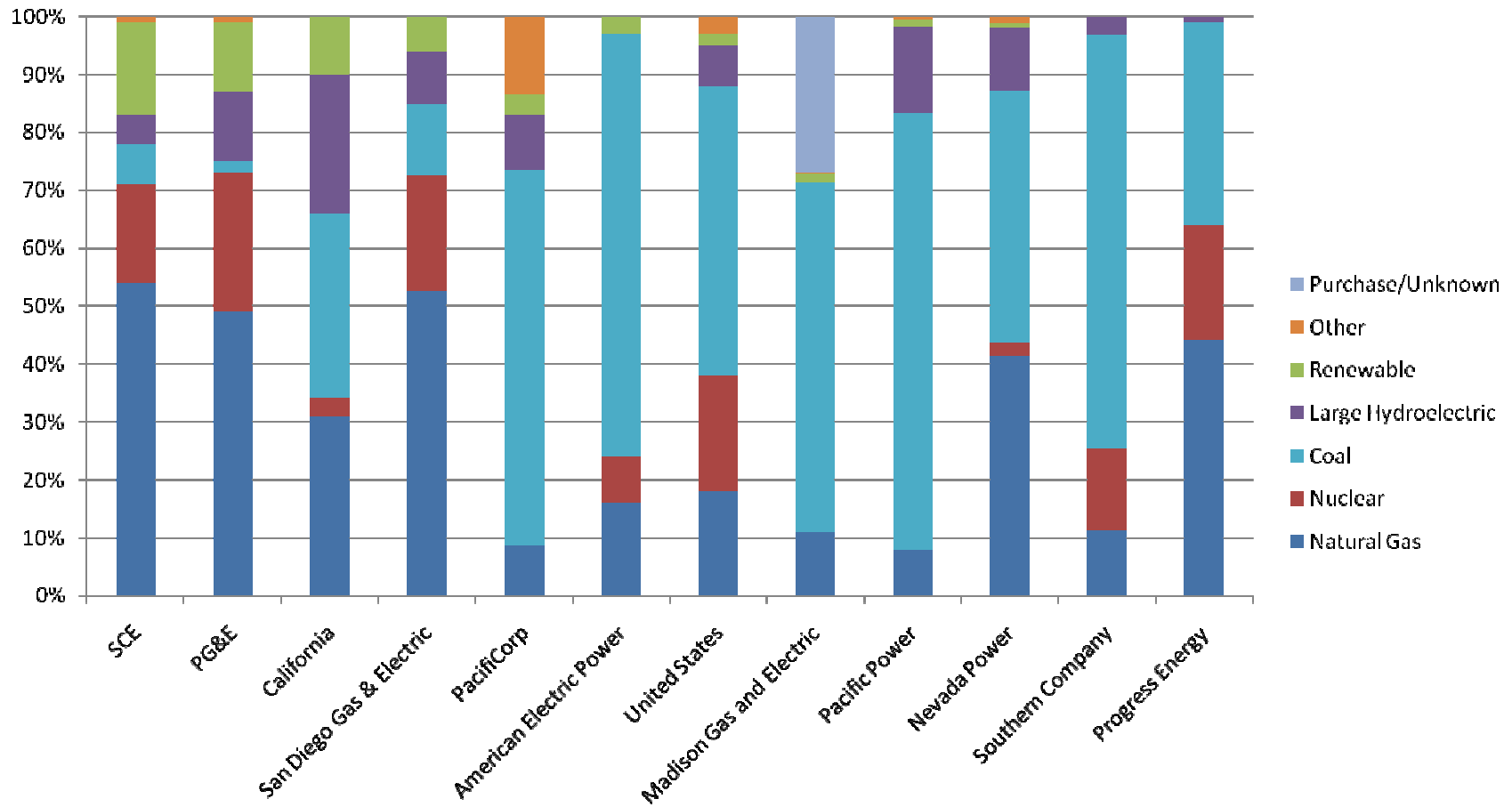
# A Comparison of California Electric Utilities

- Background
- Comparison of Energy Portfolios
- Comparison of Electric Rates
- Possible Relationship Between Type of Energy and Electric Rate

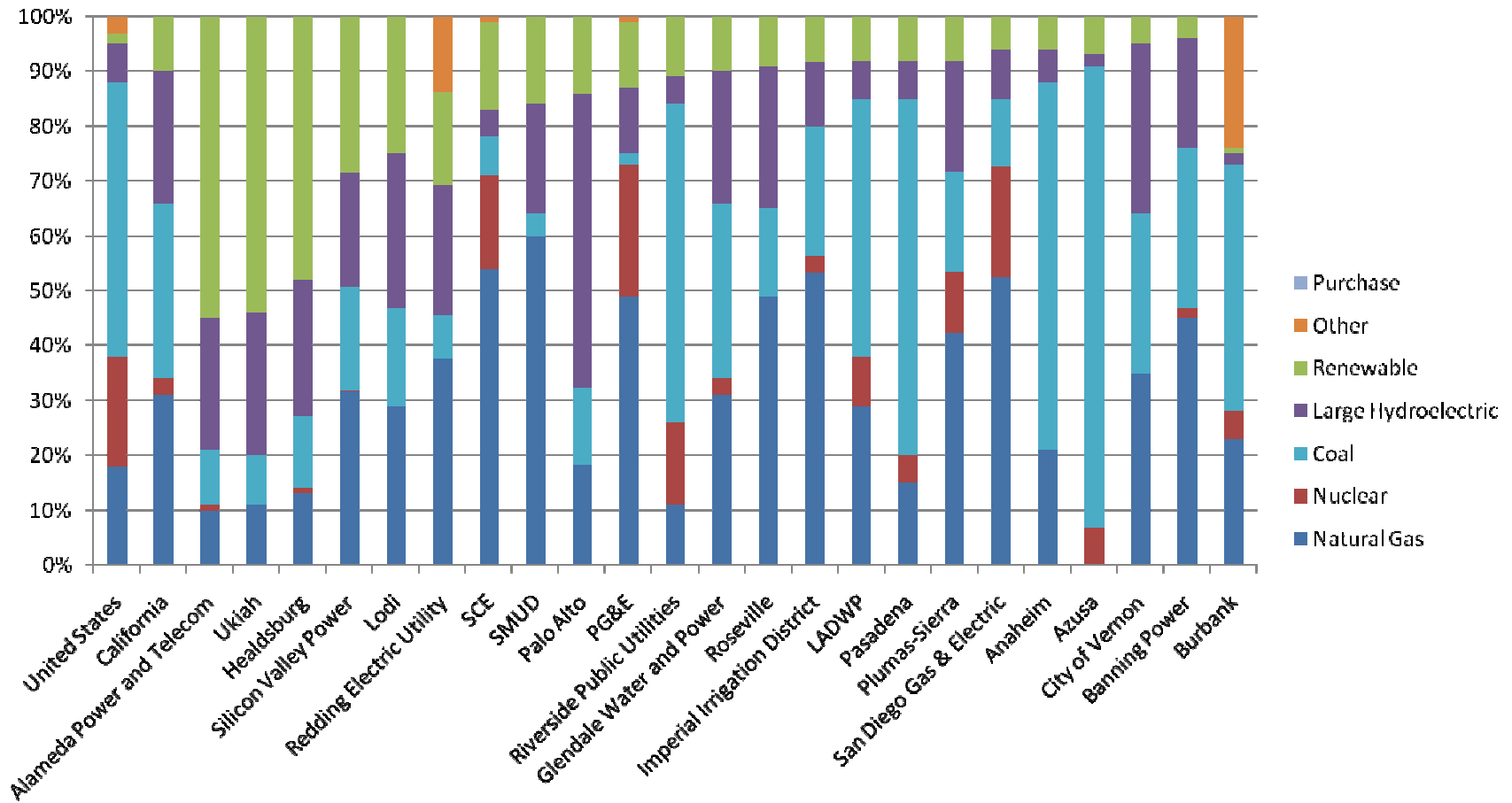
# Background

- Data was compiled throughout the month of July while interning in the District 1 office
- All data was obtained from the utilities' websites
- Most data is for 2007, some for 2008 and 2006
- For California utilities data includes energy generated and purchased
- Rates are the most basic residential rate
- Questions considered:
  - How does PG&E's energy portfolio compare to other investor owned utilities?
  - How does PG&E's energy portfolio (and other investor-owned utilities) compare to municipal utilities?
  - How do electric rates compare between California utilities?
  - Is there a relationship between the type of energy used and the rates that customers pay?

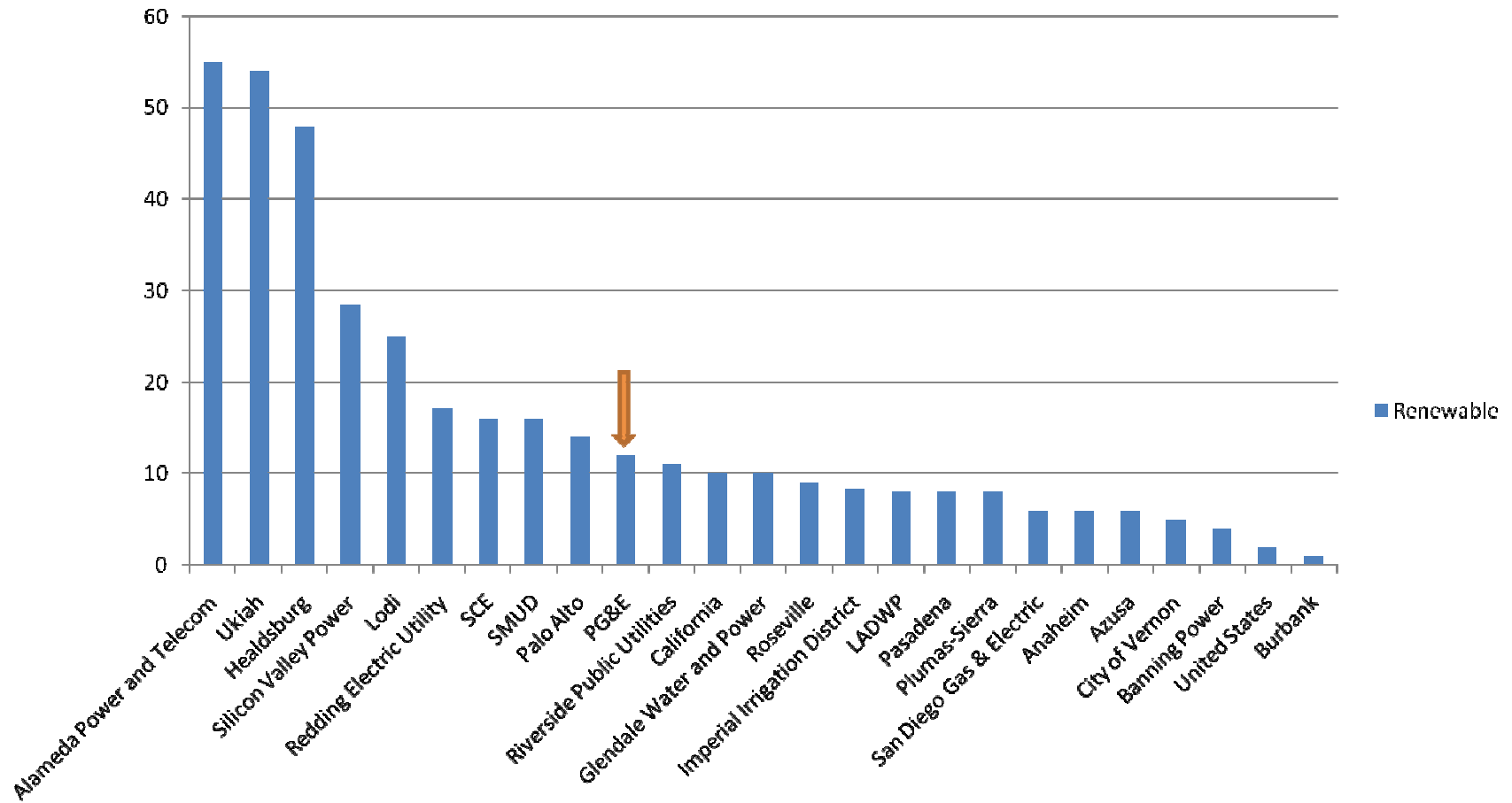
# Energy Contents of Selected Investor-Owned Utilities



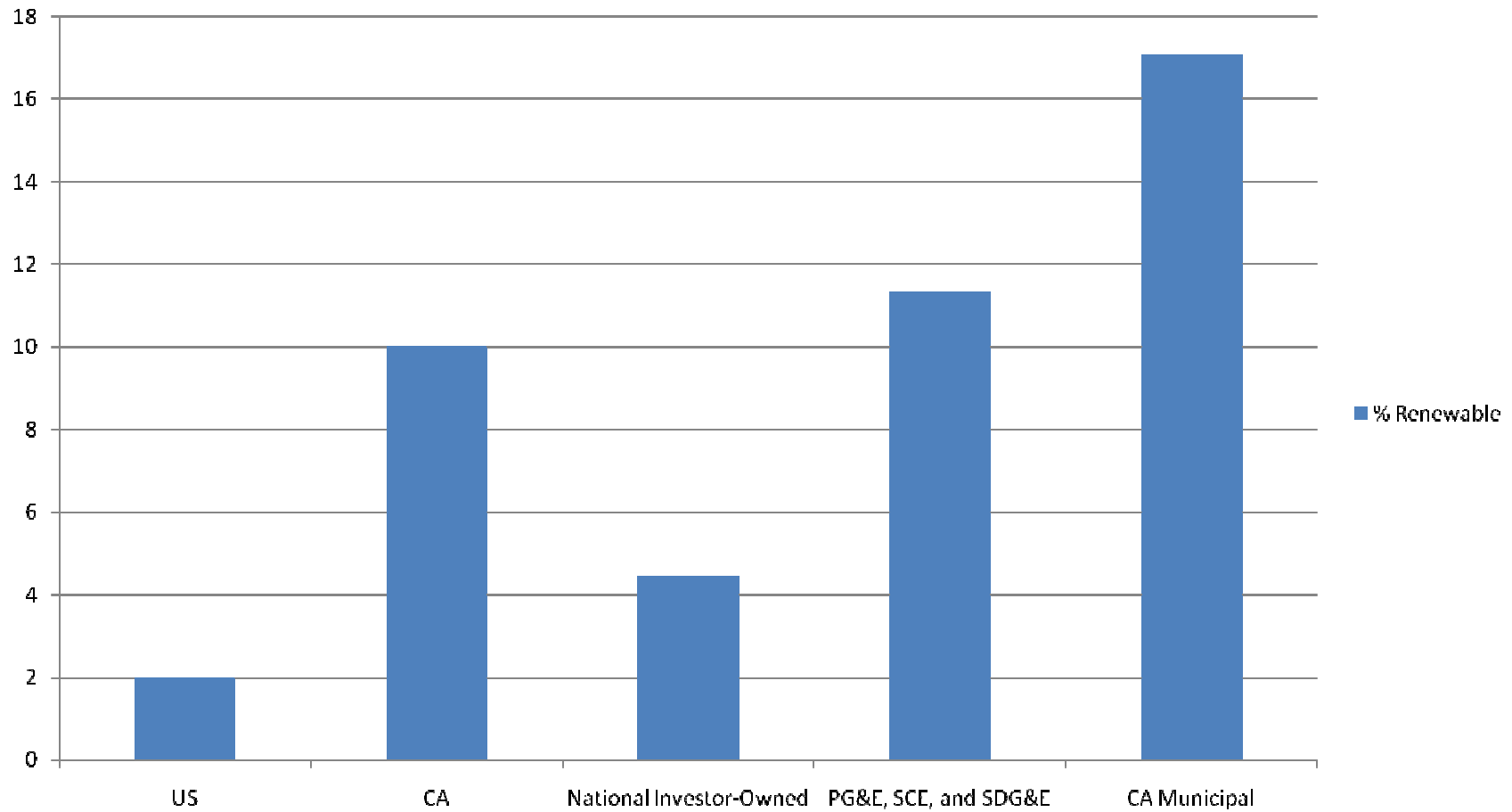
# Energy Contents of California Utilities



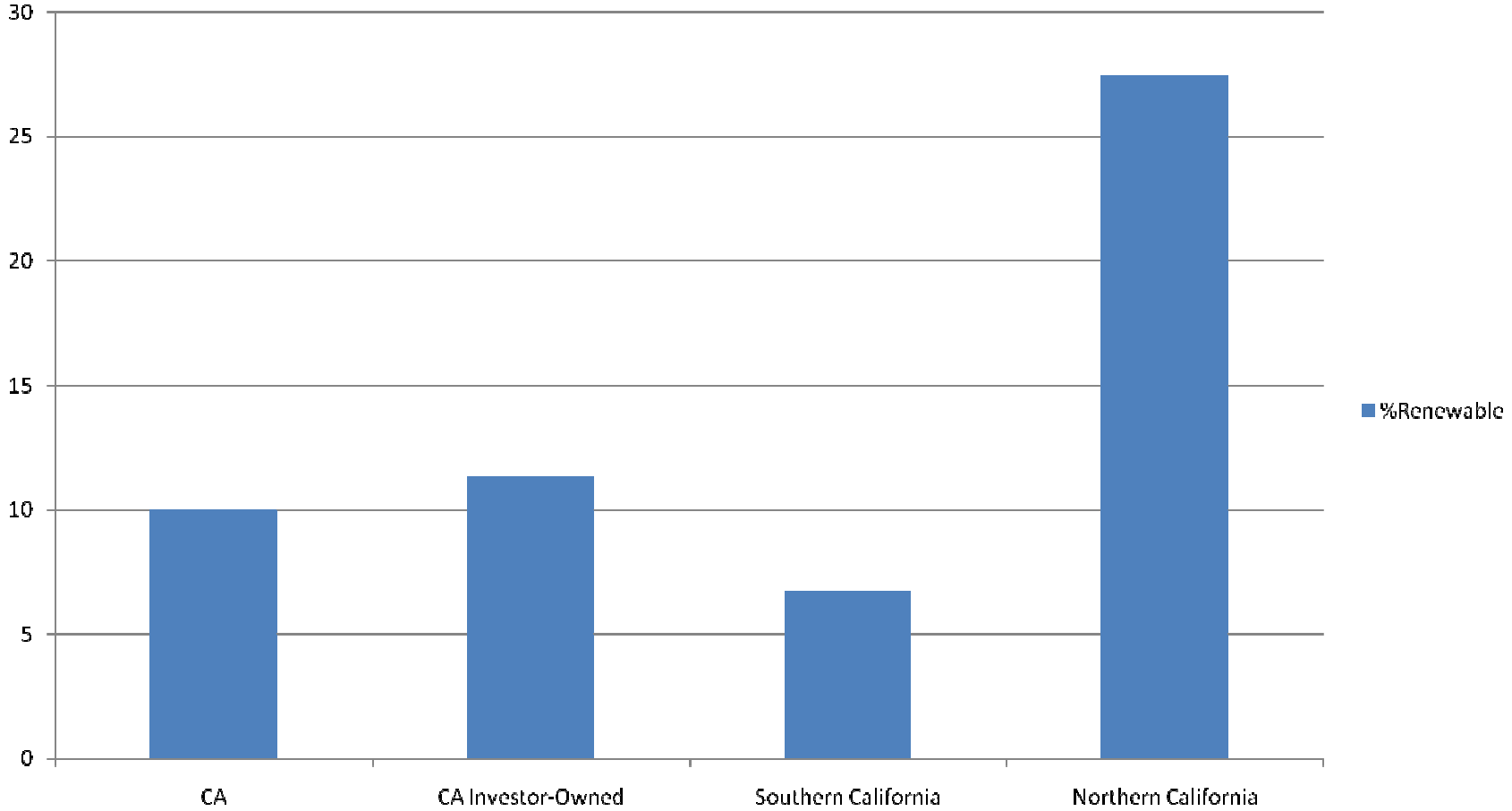
# Percent of Energy Content that is Renewable



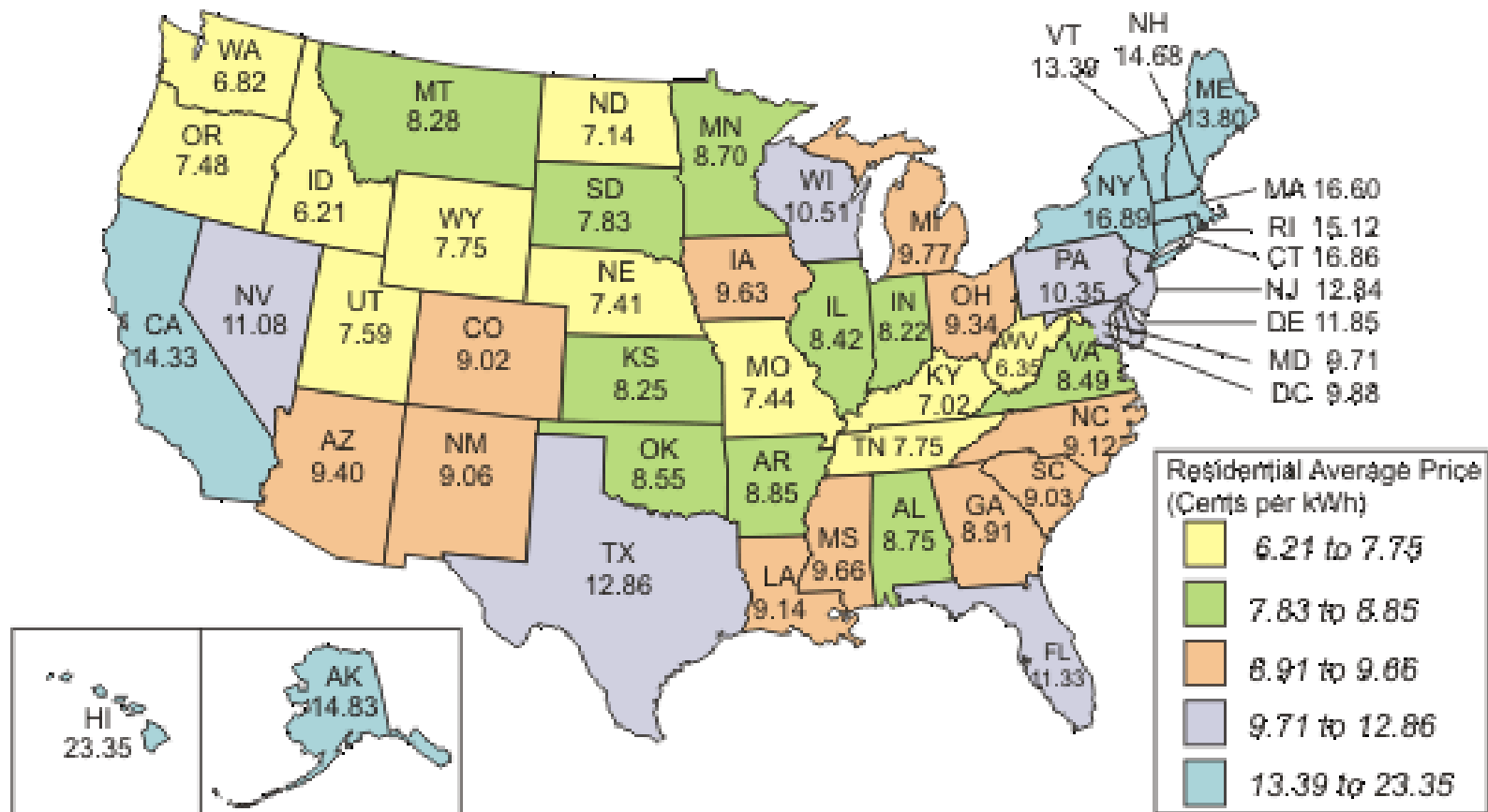
# Percent Renewable by Type of Utility



# Percent Renewable by Region



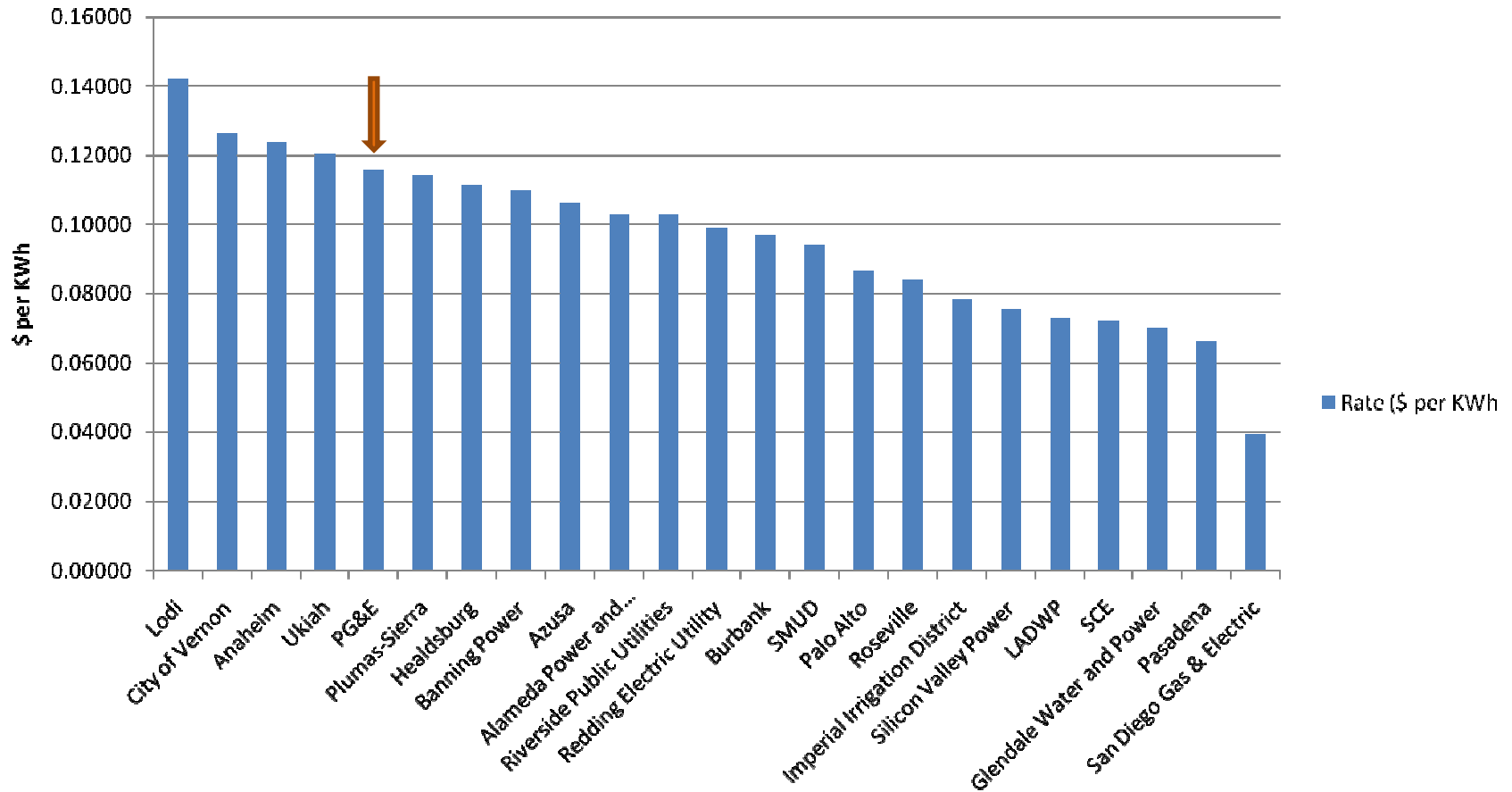
# Comparison of US Electric Rates



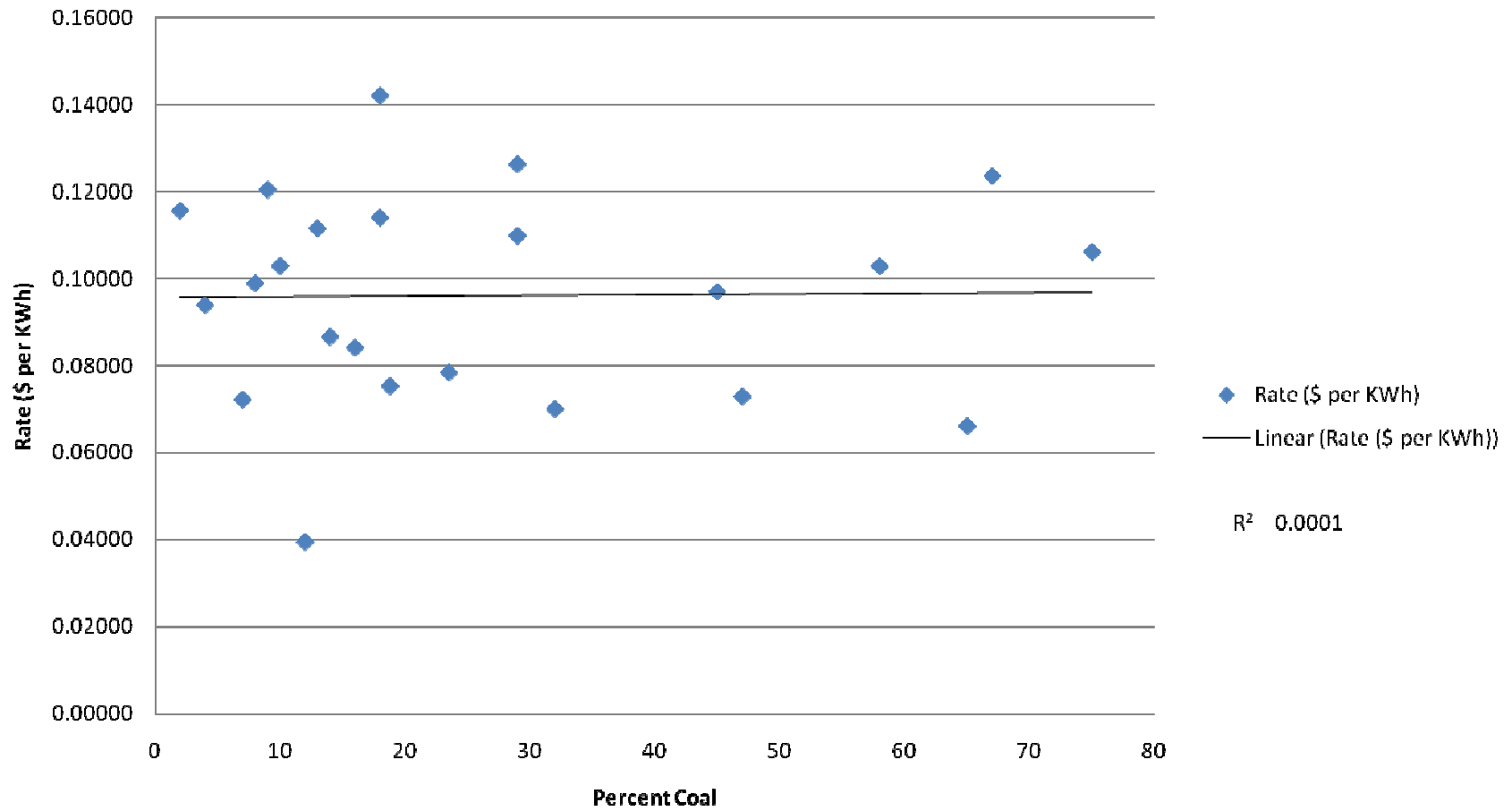
Source: Energy Information Administration, Form EIA-861, *Annual Electric Power Industry Report*.

<http://cw33.trb.com/news/kdaf-072808-us-electric-rates,0,1104895.story> (2006)

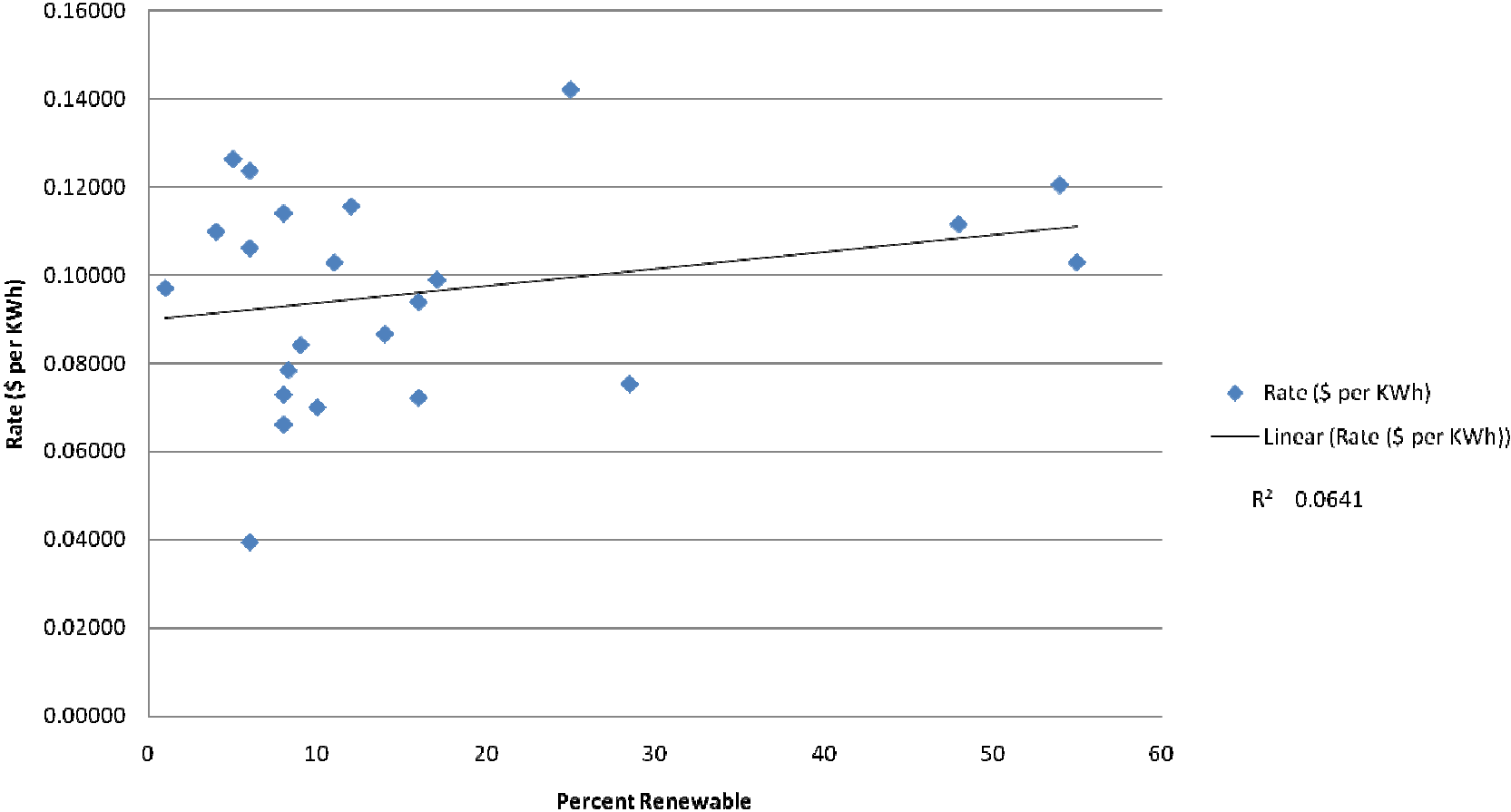
# Rates



# Percent Coal vs. Rate



# Percent Renewable vs. Rate



# Cautions with the Data

- Rates are complicated by a couple factors
  1. Cities can put revenues from their municipal electric utilities into their general fund
  2. For investor-owned utilities PG&E's rates are high while SDG&E's are on the low side for California.
- What does this mean?
  - Rates are complex so there may still be a correlation between the use of renewable energy (or coal) and electricity rates

# In Conclusion

- California Utilities including PG&E are far greener than other utilities throughout the United States
- Northern California municipal utilities are more green than utilities in the rest of the state including PG&E
- As shown by Alameda, Healdsburg, and Ukiah's energy portfolio, there does not appear to be a shortage of materials and resources for investments in renewable energy
- Utilities may be able to make investments in renewable energy without significantly increasing electricity rates