



PG&E Planning Area Electricity Demand Forecasts

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Presentation Outline

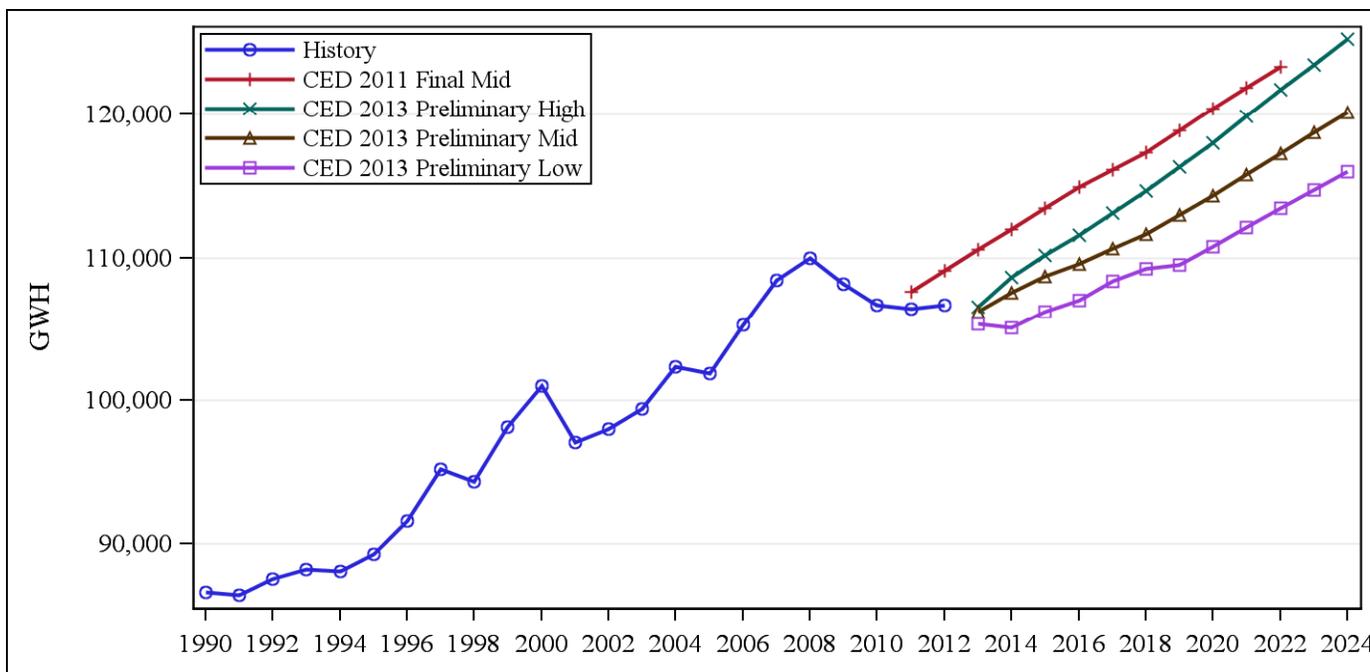
1. Planning area results
2. Efficiency and Self-Generation
3. Climate zone results
4. Comparison to PG&E's forecast



California Energy Commission

Electricity Consumption

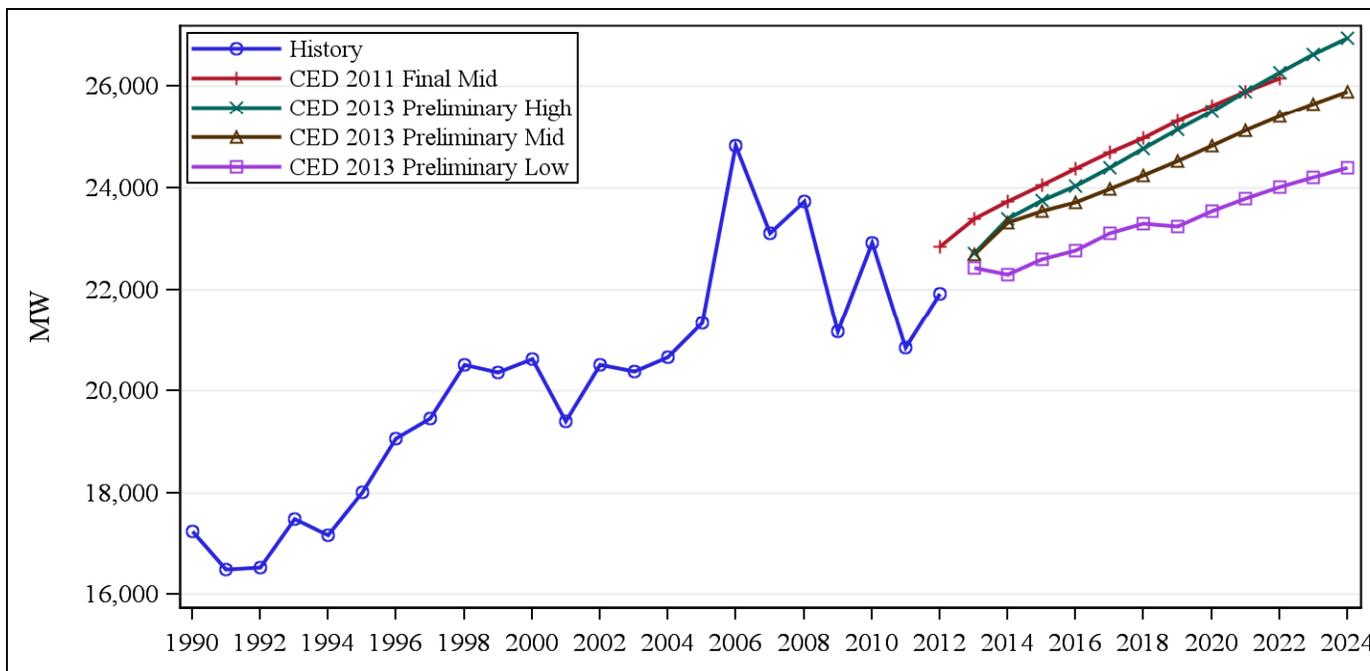
Average annual growth 2012-2024: 1.35% in high case, 0.70% in low case





Peak Demand

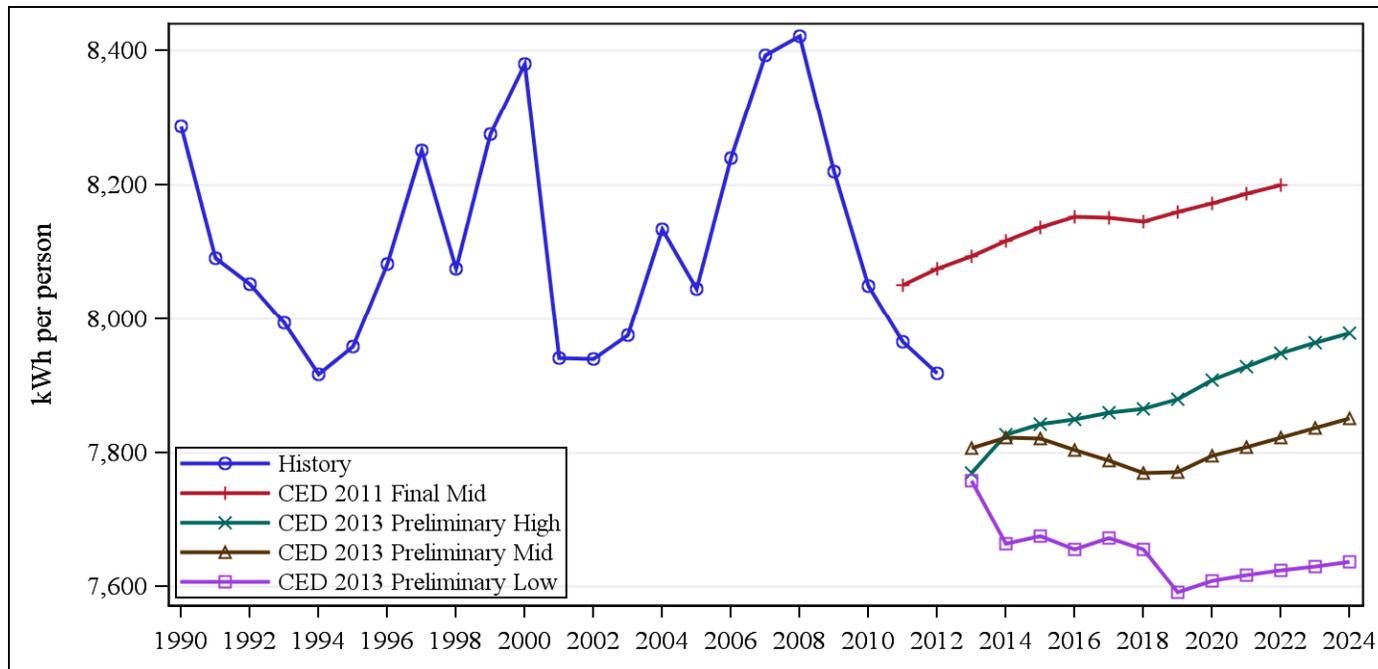
Average annual growth 2012-2024: 1.59% in high case, 0.75% in low case





Per Capita Consumption

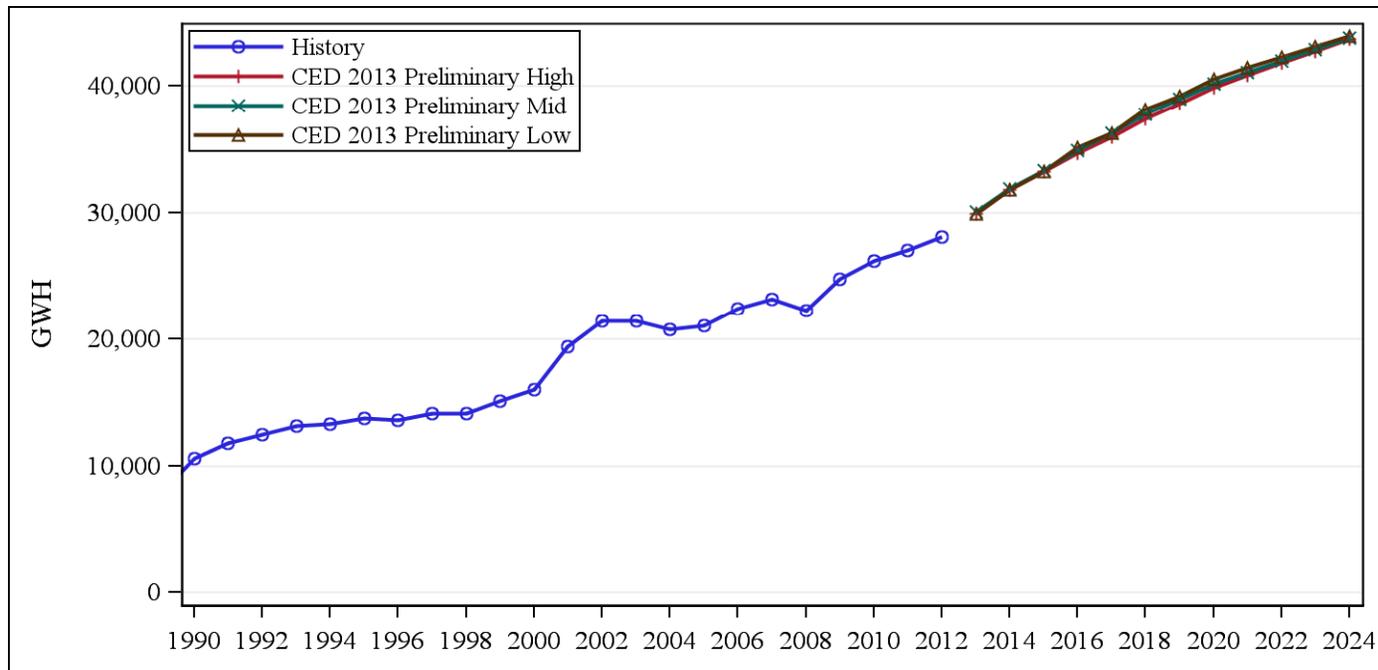
EVs push per capita consumption up toward the end of the forecast period





Efficiency Impacts

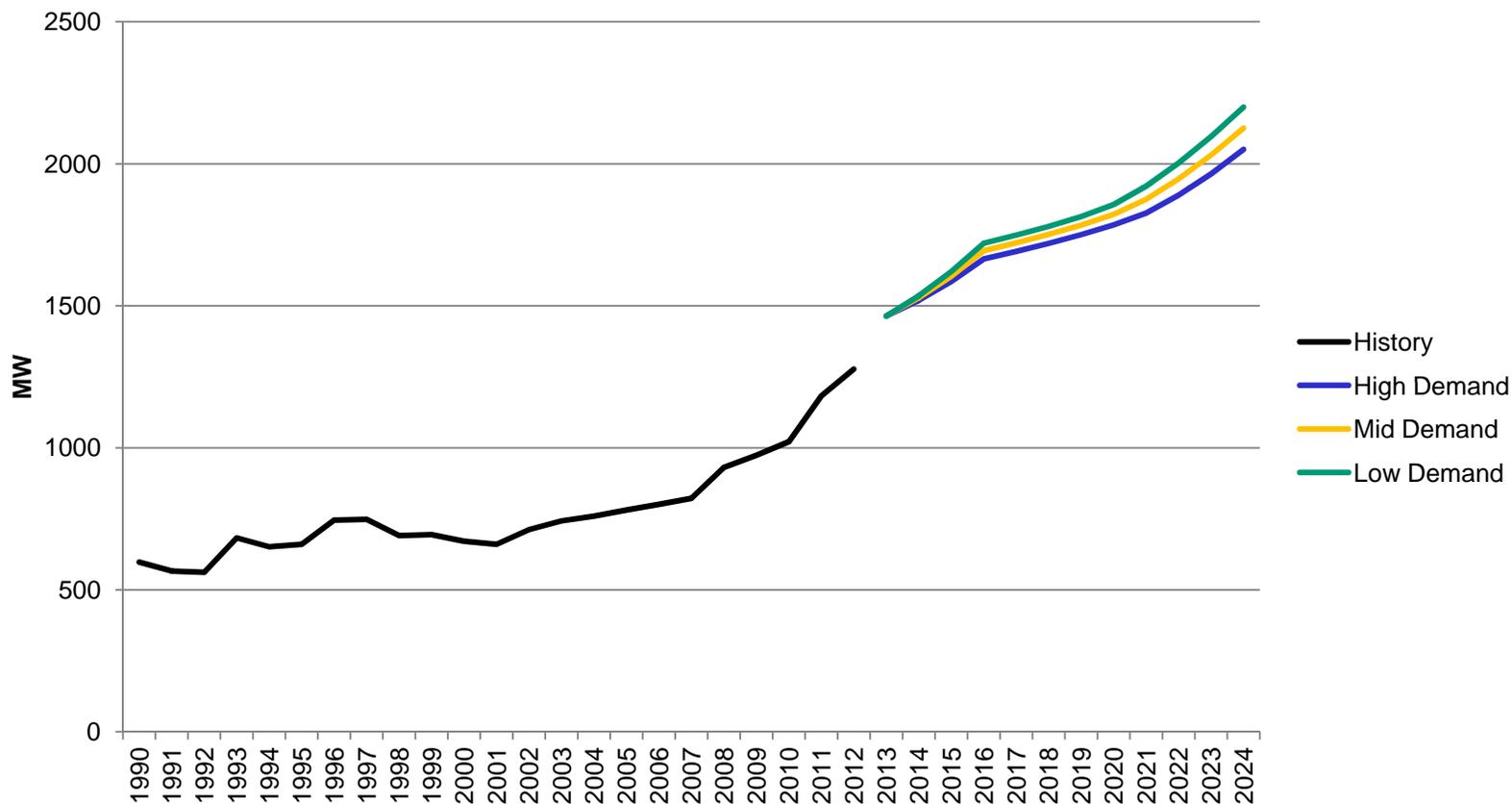
Nearly 16,000 additional GWh savings projected





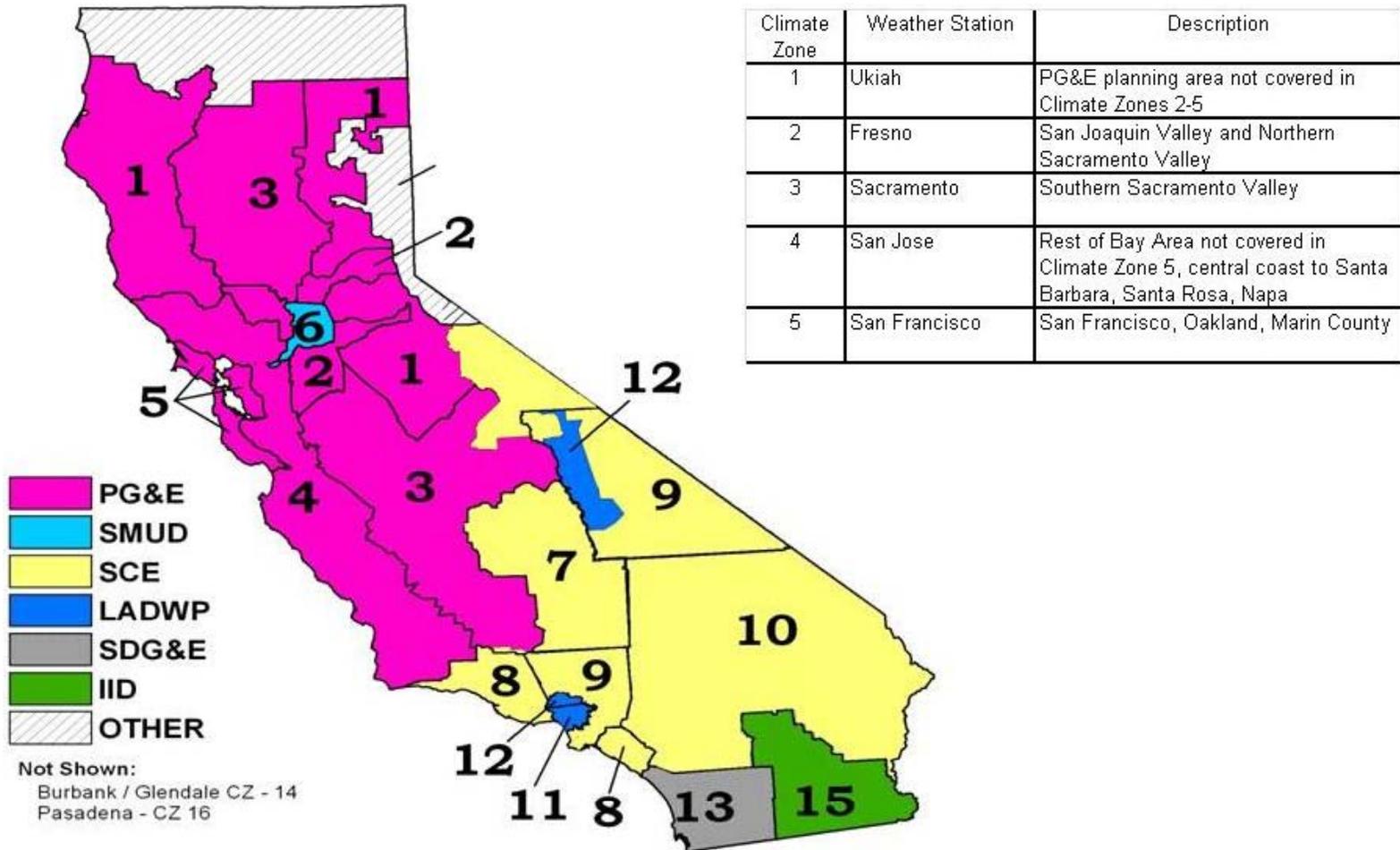
Self-Generation Peak Impacts

PV Peak impacts increase by 750 MW in mid case





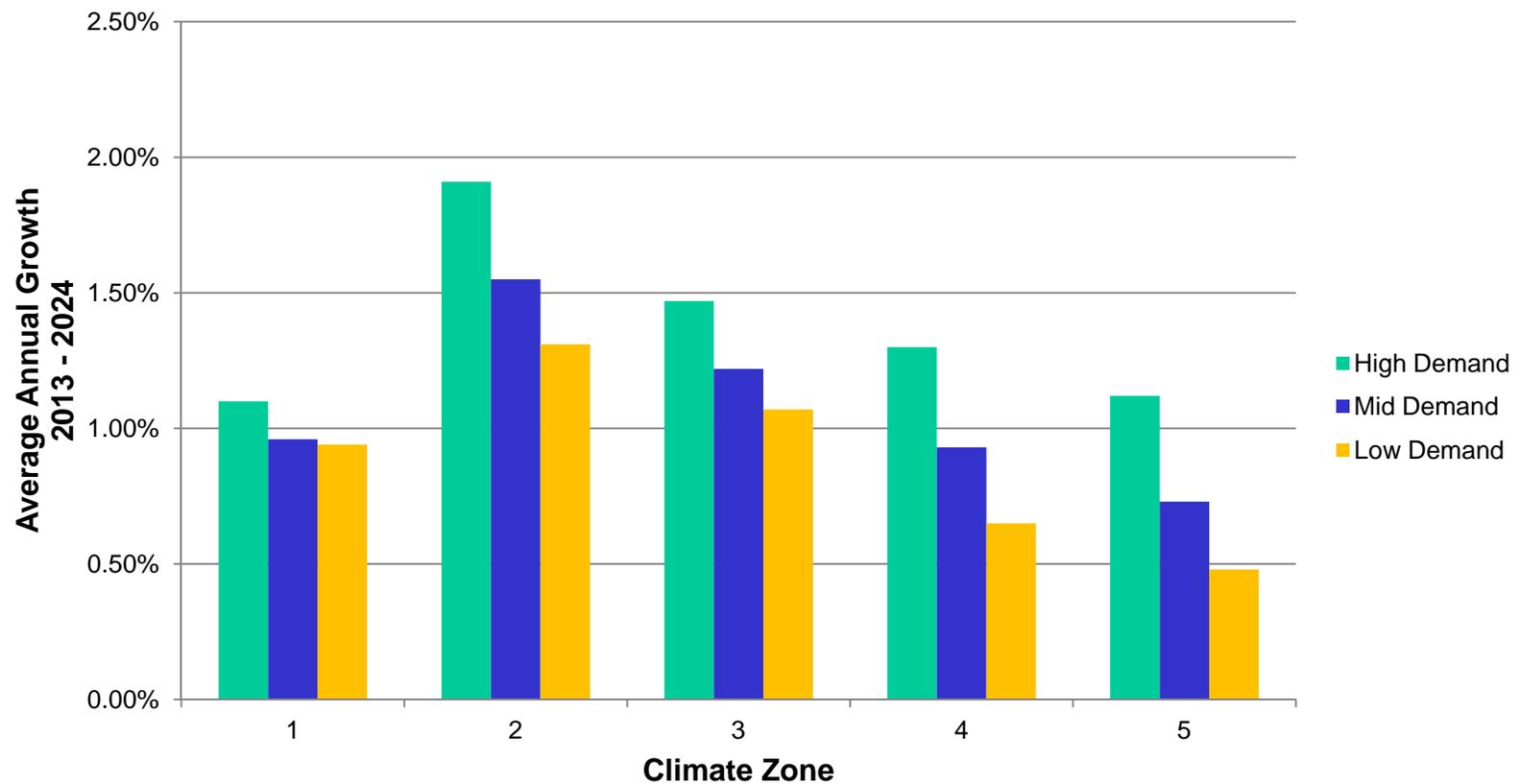
Climate Zones





Consumption Growth by Climate Zone

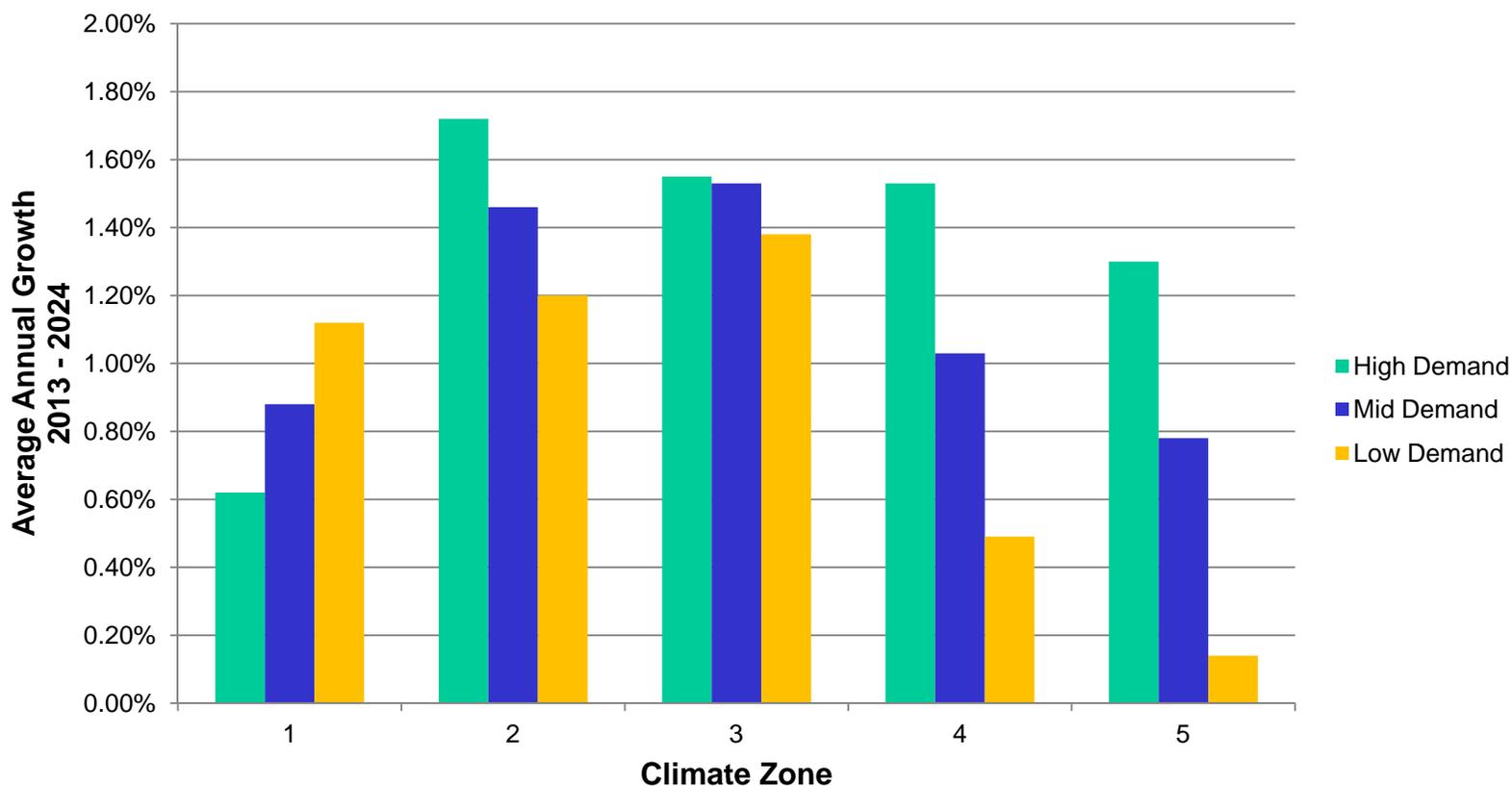
Highest growth occurs inland





Peak Growth by Climate Zone

Potential climate change impacts contribute to peak demand growth in Climate Zone 3





California Energy Commission

Climate Zone Forecast Results

Detailed results files are available online

www.energy.ca.gov/2013_energypolicy/documents

| | | Consumption by Climate Zone (GWh) | | | | | Peak Demand by Climate Zone (MW) | | | | |
|------|-----------------------|-----------------------------------|--------|--------|--------|--------|----------------------------------|-------|-------|-------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| High | 2013 | 4,760 | 10,079 | 30,285 | 34,432 | 27,018 | 1,277 | 1,958 | 5,010 | 8,096 | 6,369 |
| | 2024 | 5,431 | 12,652 | 36,097 | 40,210 | 30,882 | 1,375 | 2,403 | 6,025 | 9,712 | 7,434 |
| | Avg. Growth 2013-2024 | 1.10% | 1.91% | 1.47% | 1.30% | 1.12% | 0.62% | 1.72% | 1.55% | 1.53% | 1.30% |
| | | | | | | | | | | | |
| Mid | 2013 | 4,753 | 10,045 | 30,181 | 34,340 | 26,945 | 1,279 | 1,950 | 5,009 | 8,089 | 6,371 |
| | 2024 | 5,327 | 12,078 | 34,917 | 38,390 | 29,411 | 1,420 | 2,321 | 6,011 | 9,144 | 6,995 |
| | Avg. Growth 2013-2024 | 0.96% | 1.55% | 1.22% | 0.93% | 0.73% | 0.88% | 1.46% | 1.53% | 1.03% | 0.78% |
| | | | | | | | | | | | |
| Low | 2013 | 4,707 | 9,947 | 29,910 | 34,066 | 26,758 | 1,266 | 1,921 | 4,940 | 8,002 | 6,305 |
| | 2024 | 5,263 | 11,631 | 33,970 | 36,810 | 28,324 | 1,447 | 2,217 | 5,824 | 8,488 | 6,414 |
| | Avg. Growth 2013-2024 | 0.94% | 1.31% | 1.07% | 0.65% | 0.48% | 1.12% | 1.20% | 1.38% | 0.49% | 0.14% |



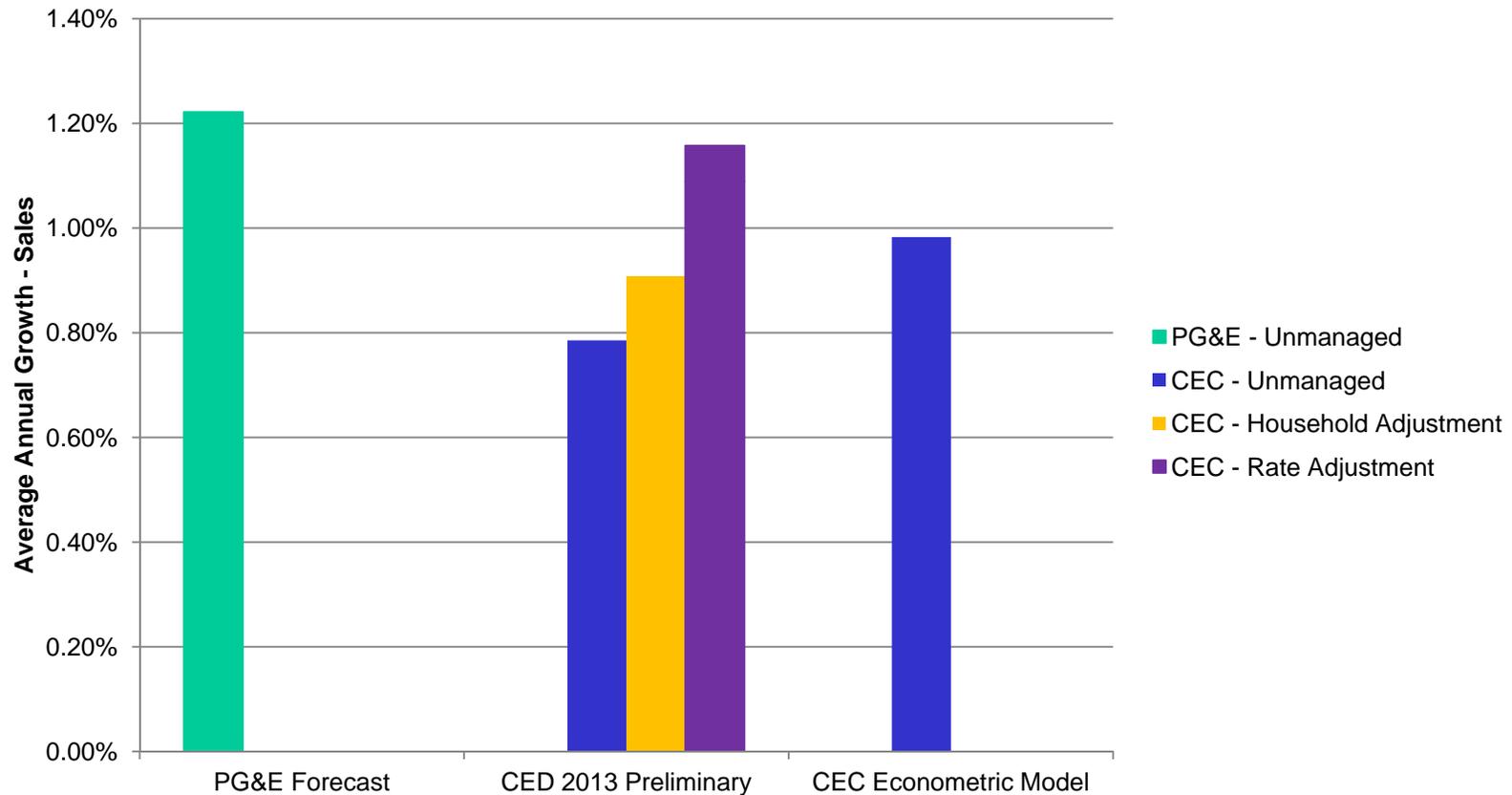
Comparison to PG&E's Forecast

- PG&E provided a managed service territory sales forecast
- Both CEC and PG&E forecasts show high residential growth and flat industrial
- PG&E forecast shows a significantly higher rate of growth in number of households
- CEC forecast projects significantly higher rates
- Adjusting for these key differences, the two sales forecasts project similar levels of growth



Comparison to PG&E's Forecast

Average annual growth in unmanaged sales forecasts is similar after adjusting for key input discrepancies





Comparison to PG&E's Forecast

CEC peak forecast shows significant growth from 2013 to 2014

