

Enterprise Carbon Accounting

January 28, 2010





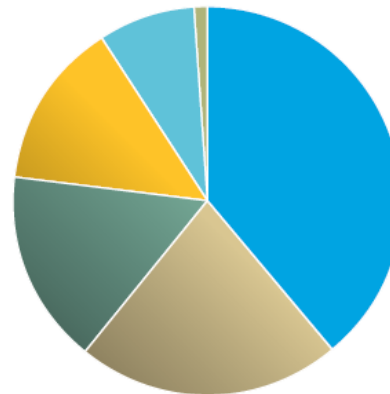
About PG&E



Electric and gas distribution customers	5.1 MM electric 4.3 MM gas
Electric transmission and distribution lines	159,686 circuit miles
Natural gas transmission and distribution pipelines	48,435 circuit miles
Electric generation capacity	6,800 MW

2008 Electric Power Mix

We serve 5% of the U.S. population but emit less than 1% of the total CO₂ emitted by the utility sector.



- Natural Gas, 39%
- Nuclear, 22%
- Large Hydroelectric, 16%
- Renewable, 14%
- Coal, 8%
- Other, 1%



Regulatory Uncertainty

- Regulatory Framework

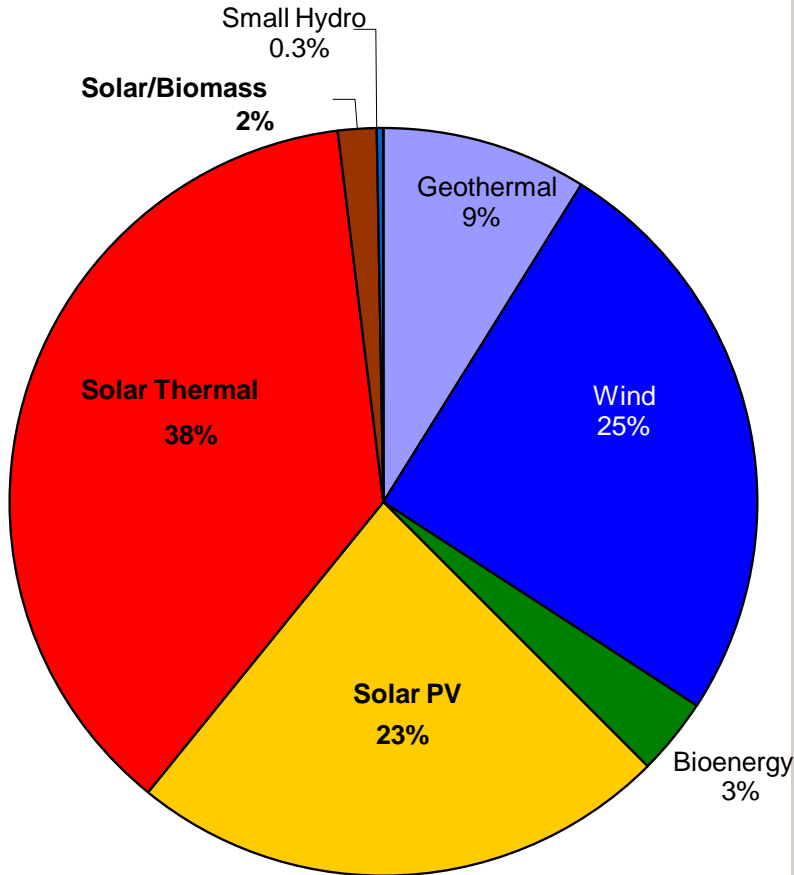
- The CPUC adopted an emissions performance standard of 1,100 lbs CO₂/MWh applicable to baseload electric generation procured by investor-owned utilities and a “cap and trade” GHG emission system for load-serving entities. (SB 1368 and AB 32)
- CARB released its “model rule” for implementing AB 32’s GHG emissions “cap and trade” program in the electric sector.

- New Developments

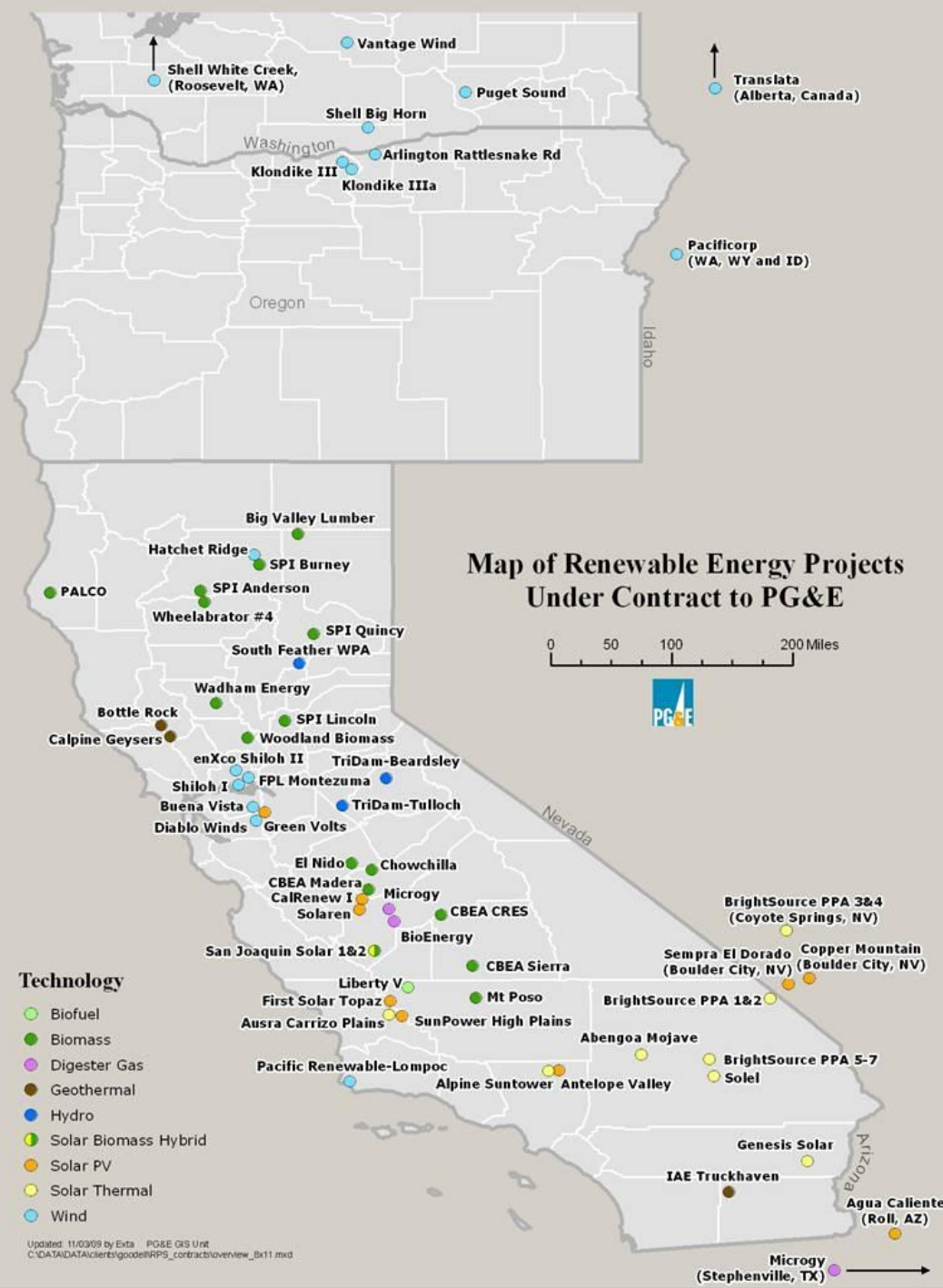
- California Air Resources Board plans to auction off permits to greenhouse gas emitters.



Diverse Portfolio of Resources



(% of MW under contract since 2002)

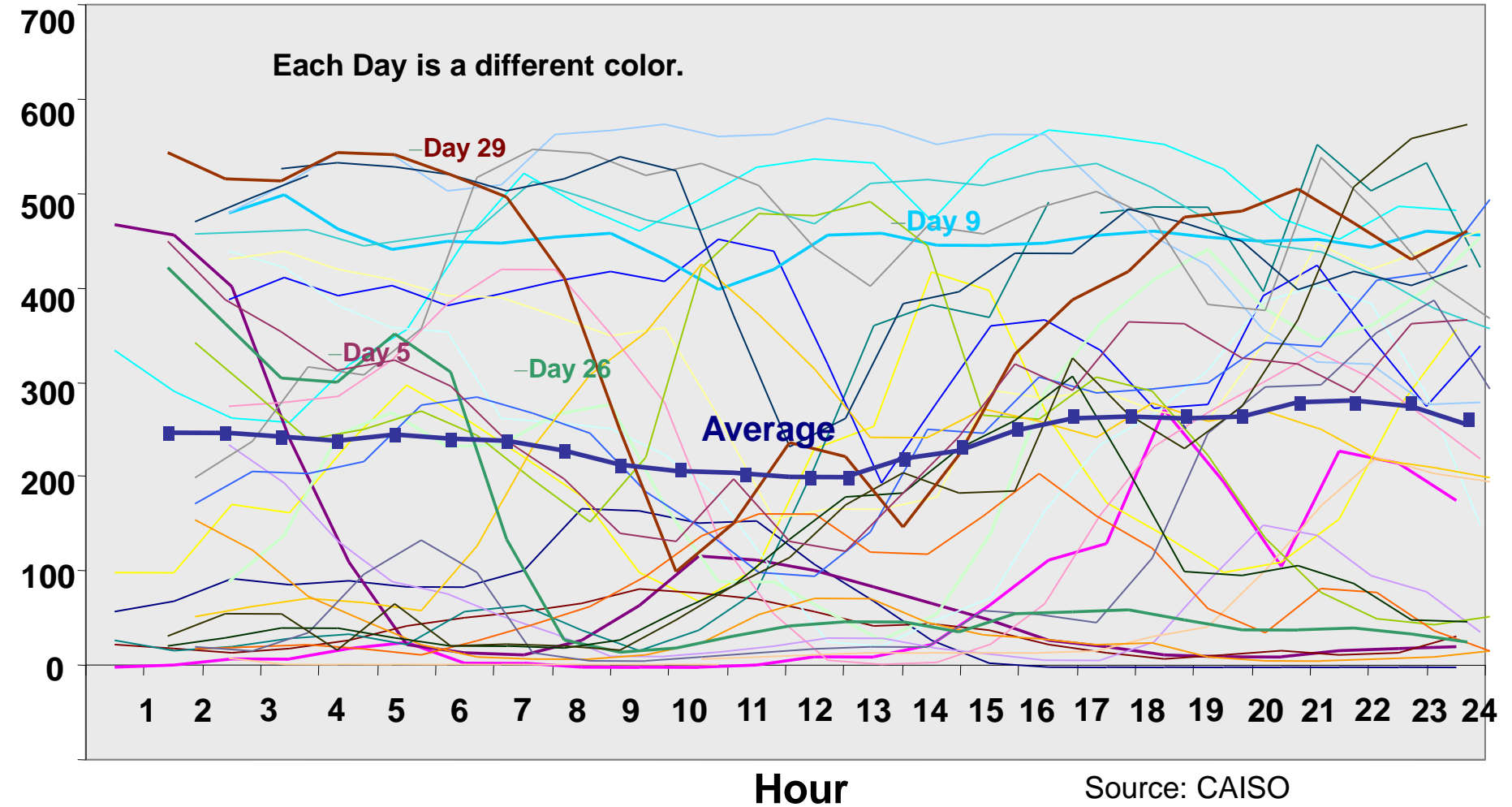


Updated: 11/03/09 by Exta PG&E GIS Unit
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Measuring Data is a Challenge

MW *The average is smooth, but day-to-day variability is great*





Integrated Demand Response, Intermittent Renewables and SmartMeter Technologies

- Demand response software can be used to integrate intermittent renewables.
- Software packages which integrate energy efficiency (Cannon), smart meter technologies (Silver Springs) and home energy consumption (Cisco).

- IEEE 802.15.4 ZigBee
- IP-based RF Mesh

