

Sustainable Energy Business Opportunities & Challenges

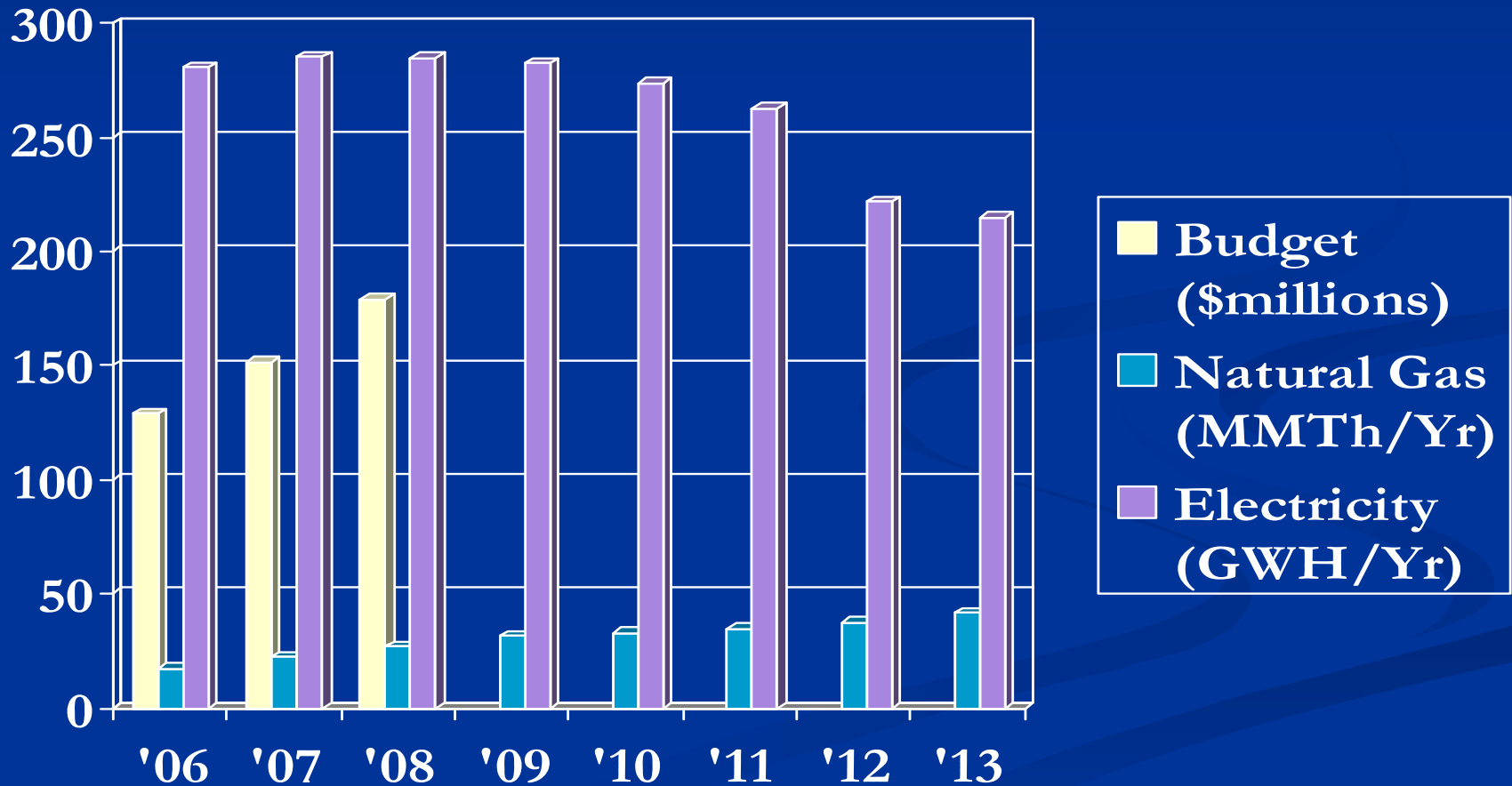
Mark Gaines
Director Customer Programs
SDG&E / So. Cal. Gas
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Sustainable Energy Programs

- Energy Efficiency
- Distributed Generation
- Renewable Power

Energy Efficiency Programs

- Incentives for customers to invest in energy efficient products
- **Goal:** to implement “all cost effective” energy efficiency opportunities



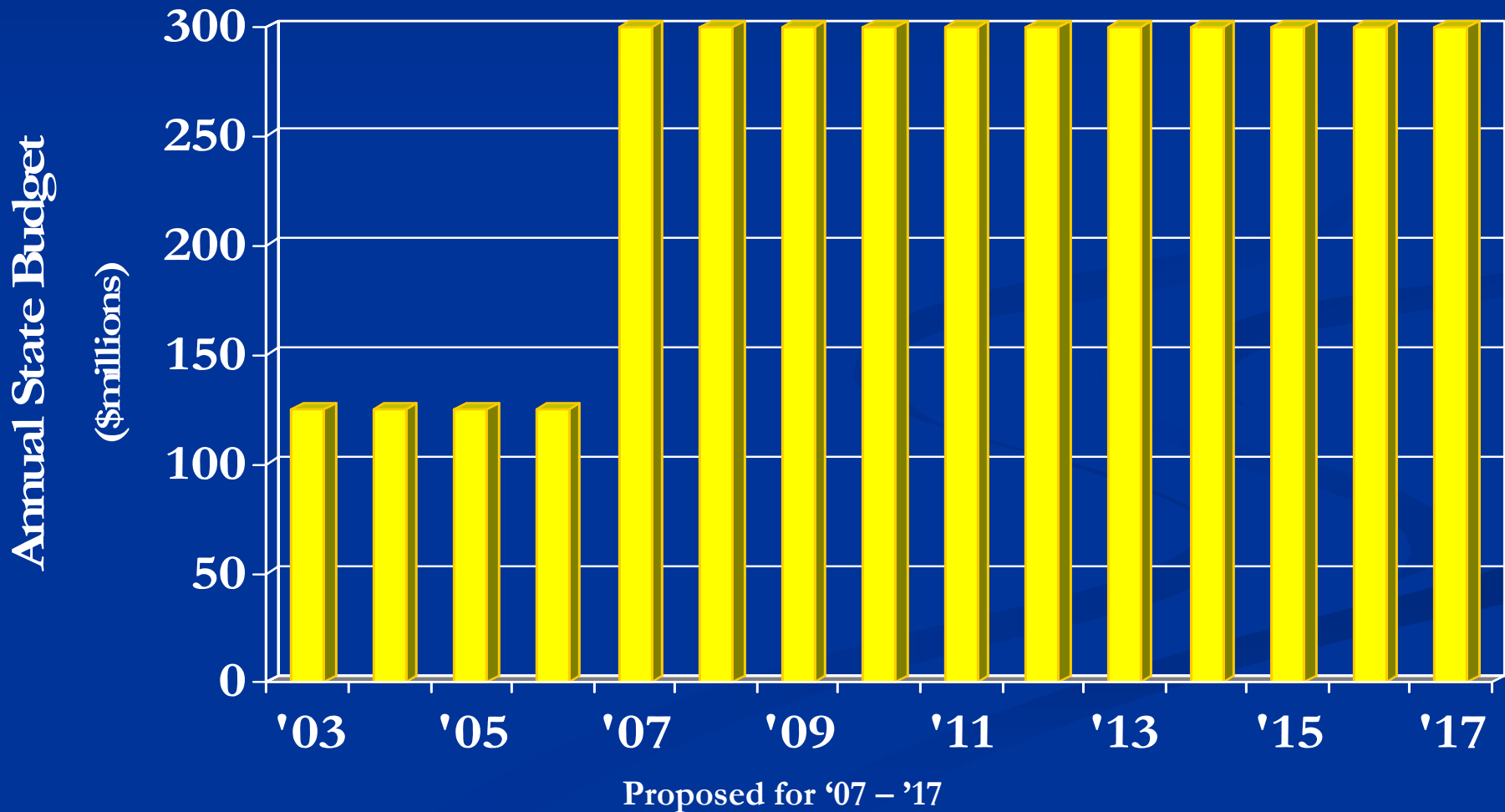
Energy Efficiency Programs

- Challenges:
 - Development of cost effective programs
 - Marketing effectively to customers
 - Development & demonstration of new technologies



Distributed Generation Programs

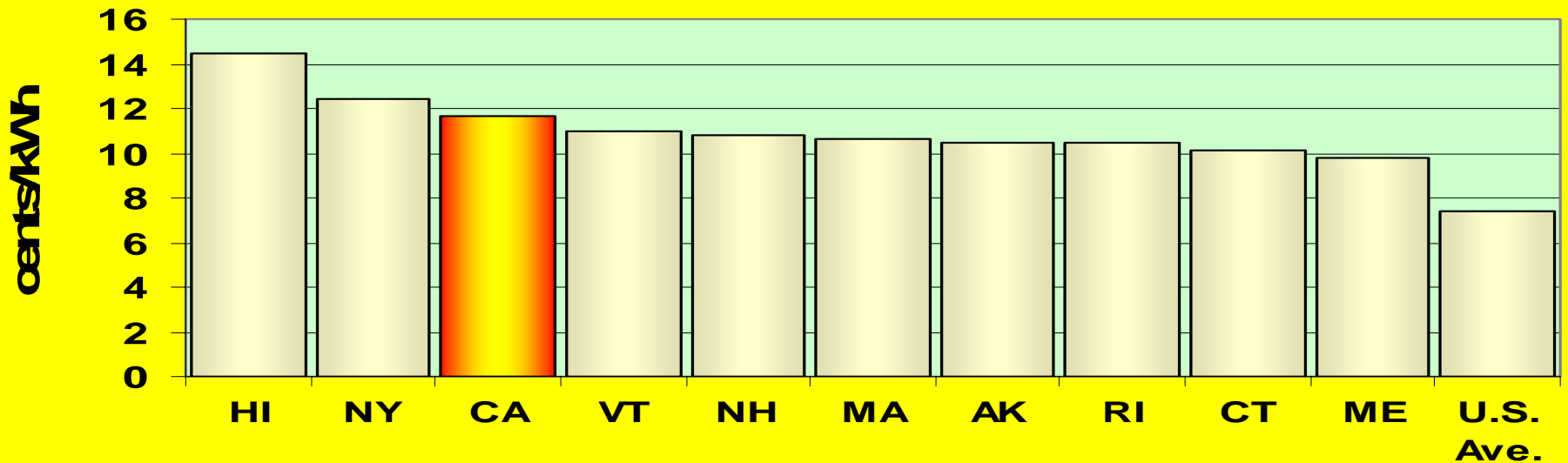
- Incentives for customers to invest in high efficiency & renewable generation
- **Goal:** to reduce cost of PV, fuel cells and other distributed gen. technology



Distributed Generation Programs

- Challenges:
 - Marketing the program
 - 8 to 10 year payback on investment
 - Controlling costs to customers

State Electricity Prices, 2003



Source: Energy Information Administration, Wash., DC

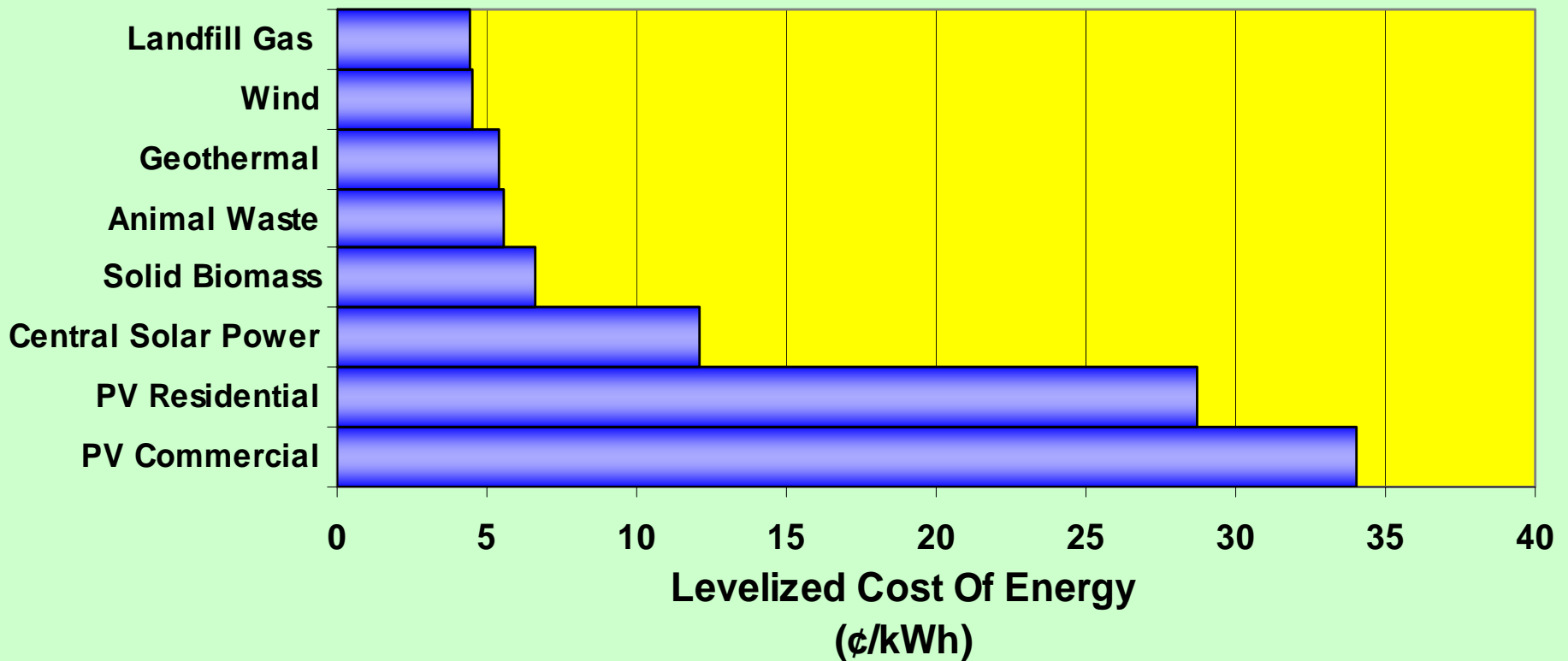
Top Ranking 10 States

Distributed Generation Programs

Challenges (cont.)

- Other renewable technologies are far less expensive than PV

Renewable Energy Technology Economics: 2005*



Renewable Power Procurement

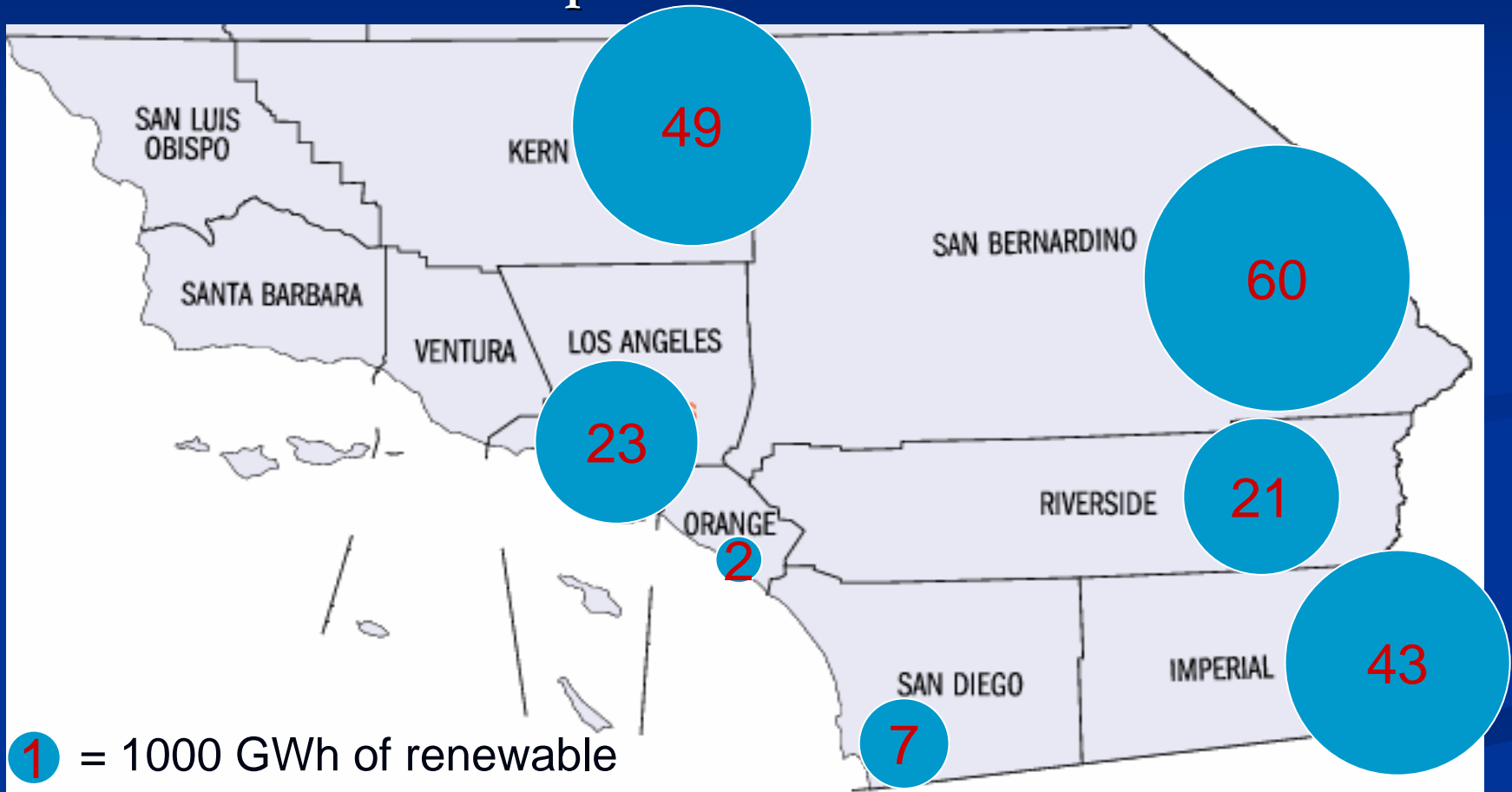
- Challenges:
 - Reliability of renewable power



- Access to renewable resources

Renewable Power Procurement

- Renewable resource potential is in remote locations*



1 = 1000 GWh of renewable potential

*Technical potential as determined by PIER & RER. PIER - The Energy Commission's Public Interest Energy Research Program.
 RER - Regional Economic Research, Inc, a technical contractor to the Energy Commission's Renewable Energy Program