

# Green Power Market Update



**2008 National  
Renewable Energy  
Marketing Conference,  
Denver**

**Lori Bird, NREL**

**October 27, 2008**

# The Year in Review

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## Green Power Market Highlights in 2008

- Intel makes largest purchase (1.3 million MWh)
- Palo Alto breaks 20% participation threshold
- FTC review of Environmental Marketing Guidelines
- APX North American Renewables Registry Launched
  - REC tracking systems now available nationwide
- RGGI states adopt voluntary market set asides

# Year in Review (cont.)

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## Green Power Market Highlights in 2008

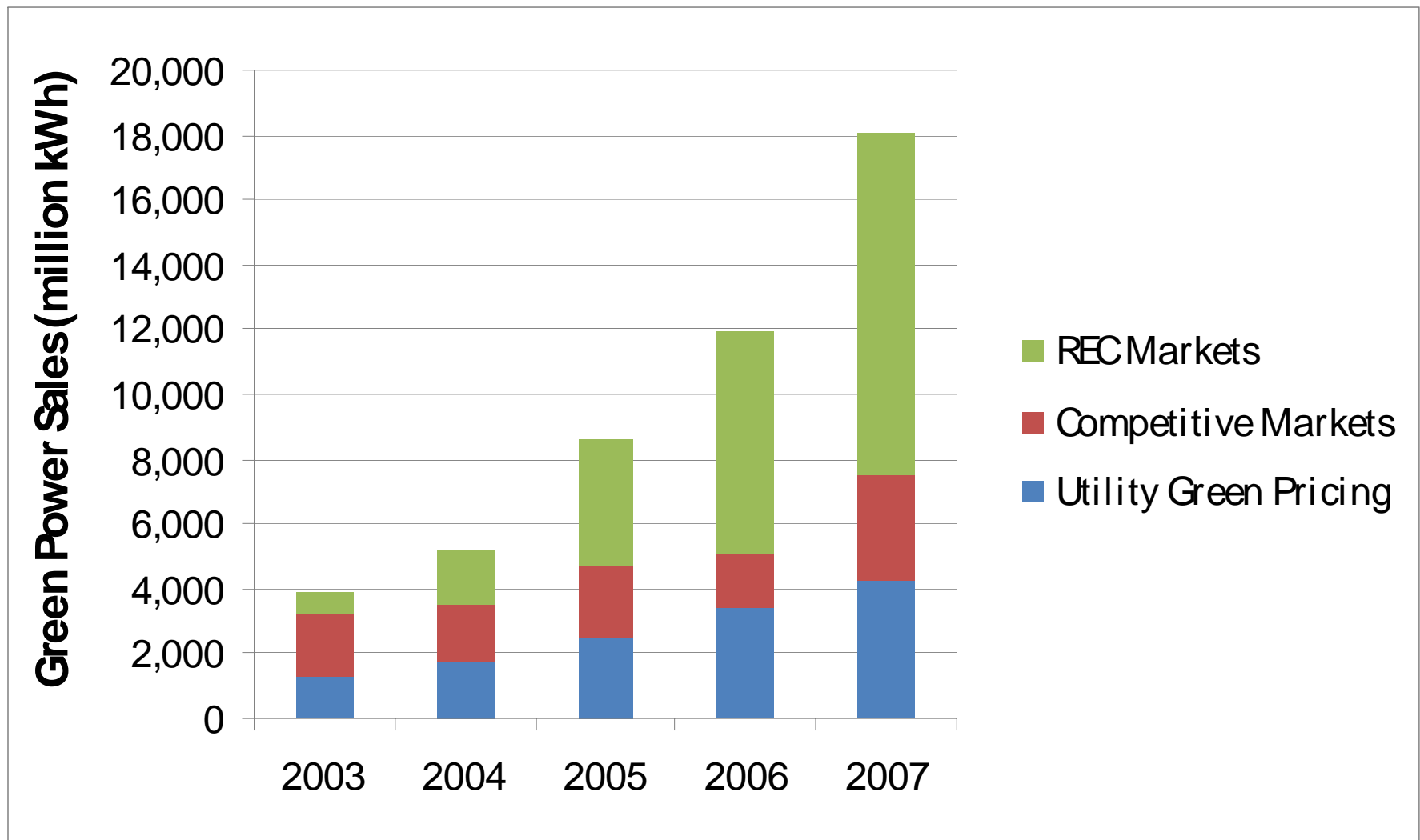
- Green-e Climate certifies new carbon offset products with renewable energy protocol
- First VCS-certified offsets from U.S. renewables project; Gold Standard registry transaction by U.S. marketer
- Cities continue to issue green power challenges
- Increased media attention on marketing costs

# Green Power Market Status

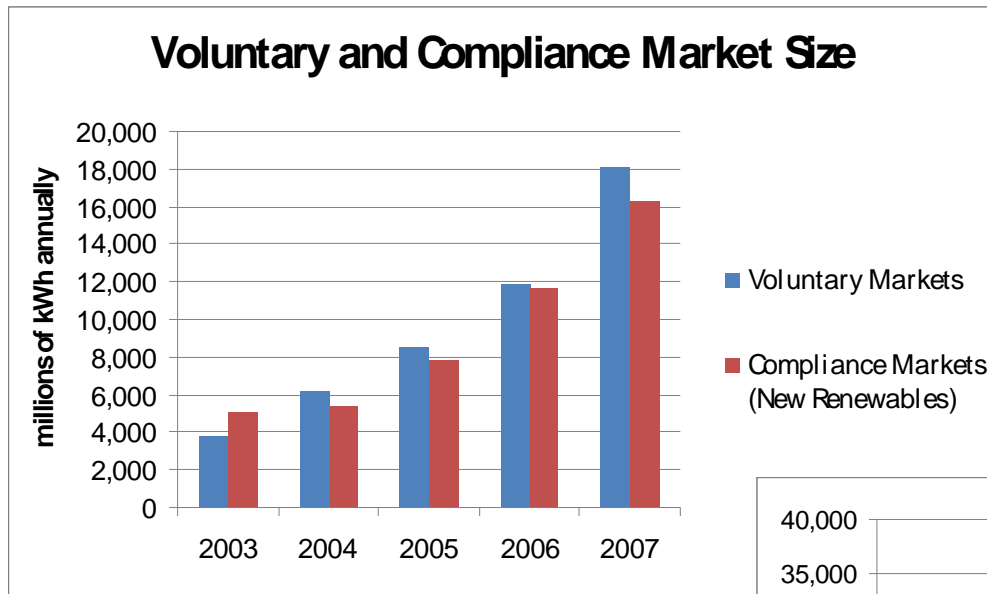
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- More than 850 utilities (about 25%) offer green power programs covering most states
- Green power sales grew **50%** in 2007; Strong growth has continued to date in 2008
  - REC and competitive markets growing faster than green pricing
  - EPA Green Power Partner purchases up ~35% as of Oct 2008
- More than 850,000 customers buying green power
  - Number of customer participants grew ~20%
- Nonresidential purchases still dominating sales
  - $\frac{3}{4}$  of sales to nonresidential customers
- Utility premiums continue to decline

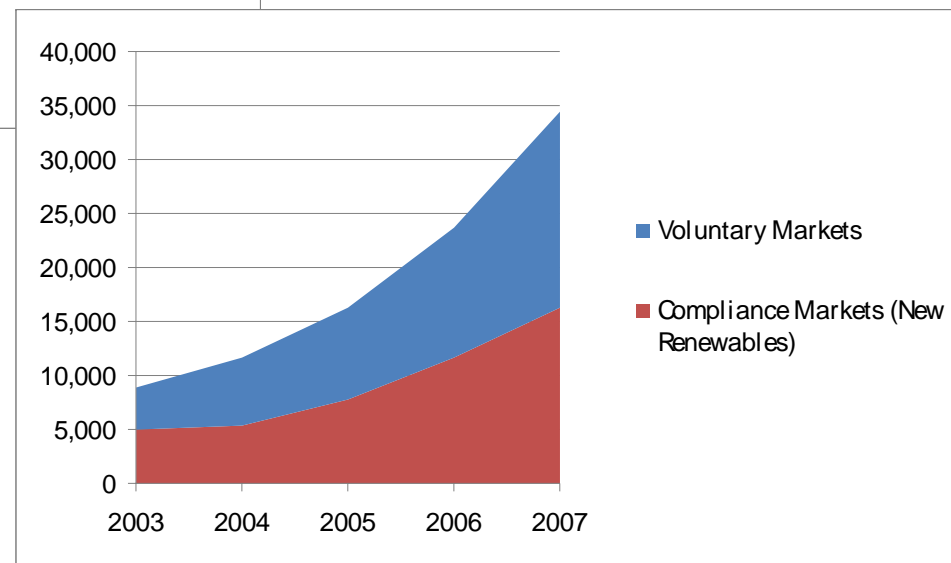
# U.S. Voluntary Green Power Sales



# Compliance vs. Voluntary Markets



RPS Demand for New Renewables (Millions of kWh)				
2008	2009	2010	2011	2012
22,490	34,588	60,264	77,776	91,223

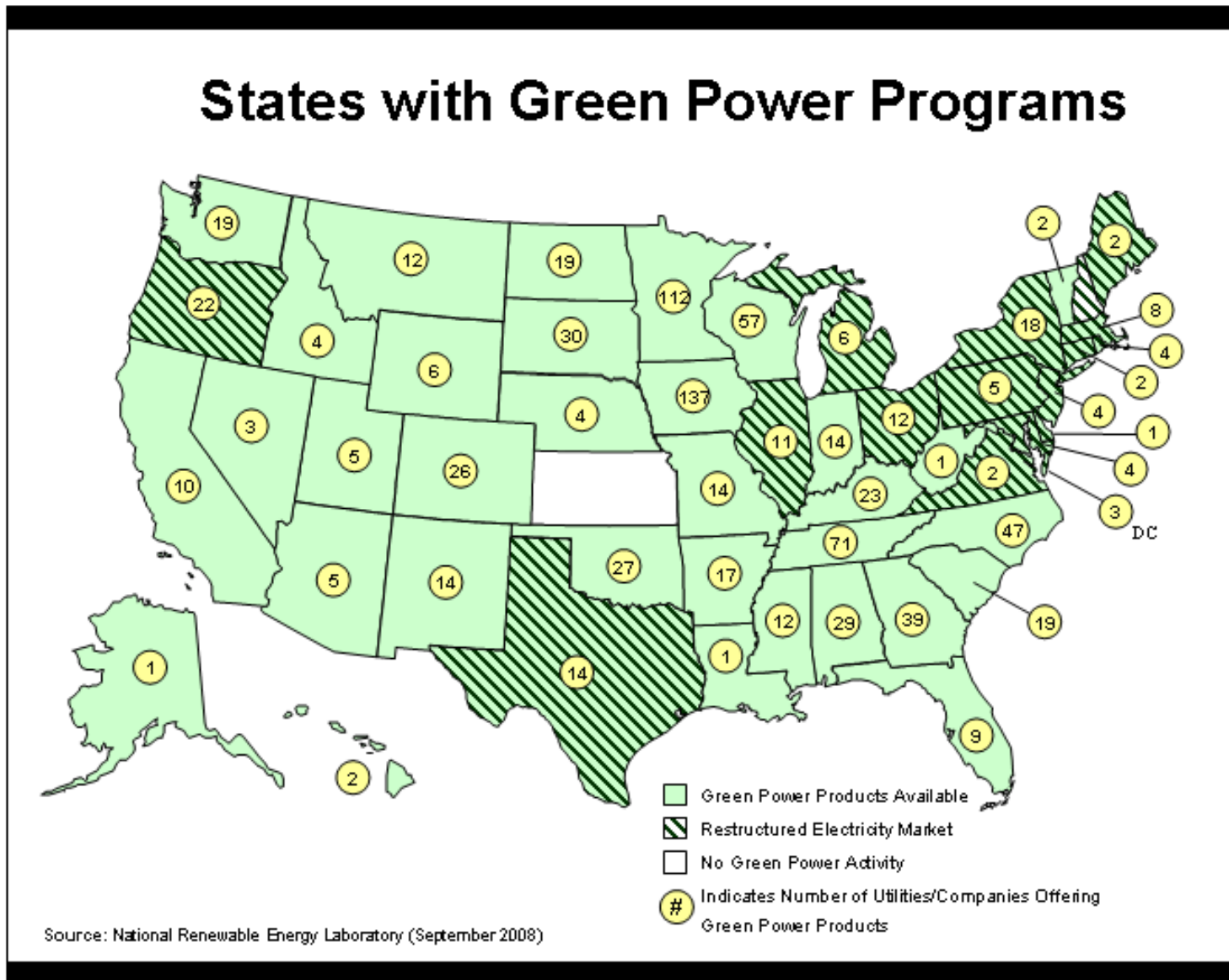


Voluntary markets exceed RPS demand for new renewables

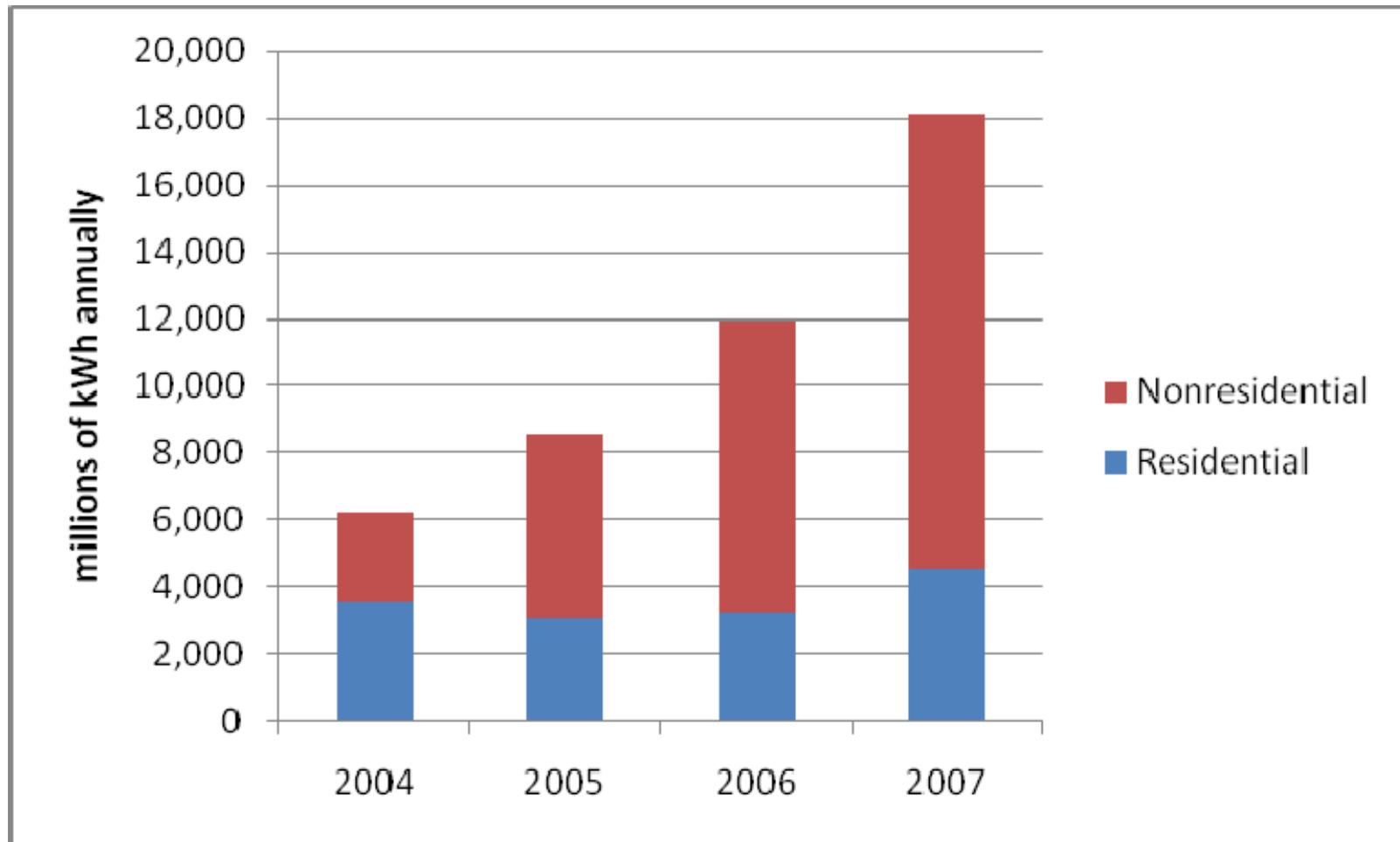
Compliance market data assumes full compliance achieved; only new RE

Source: LBNL/UCS (RPS data) and NREL (voluntary markets)

# Green Power Programs Widespread

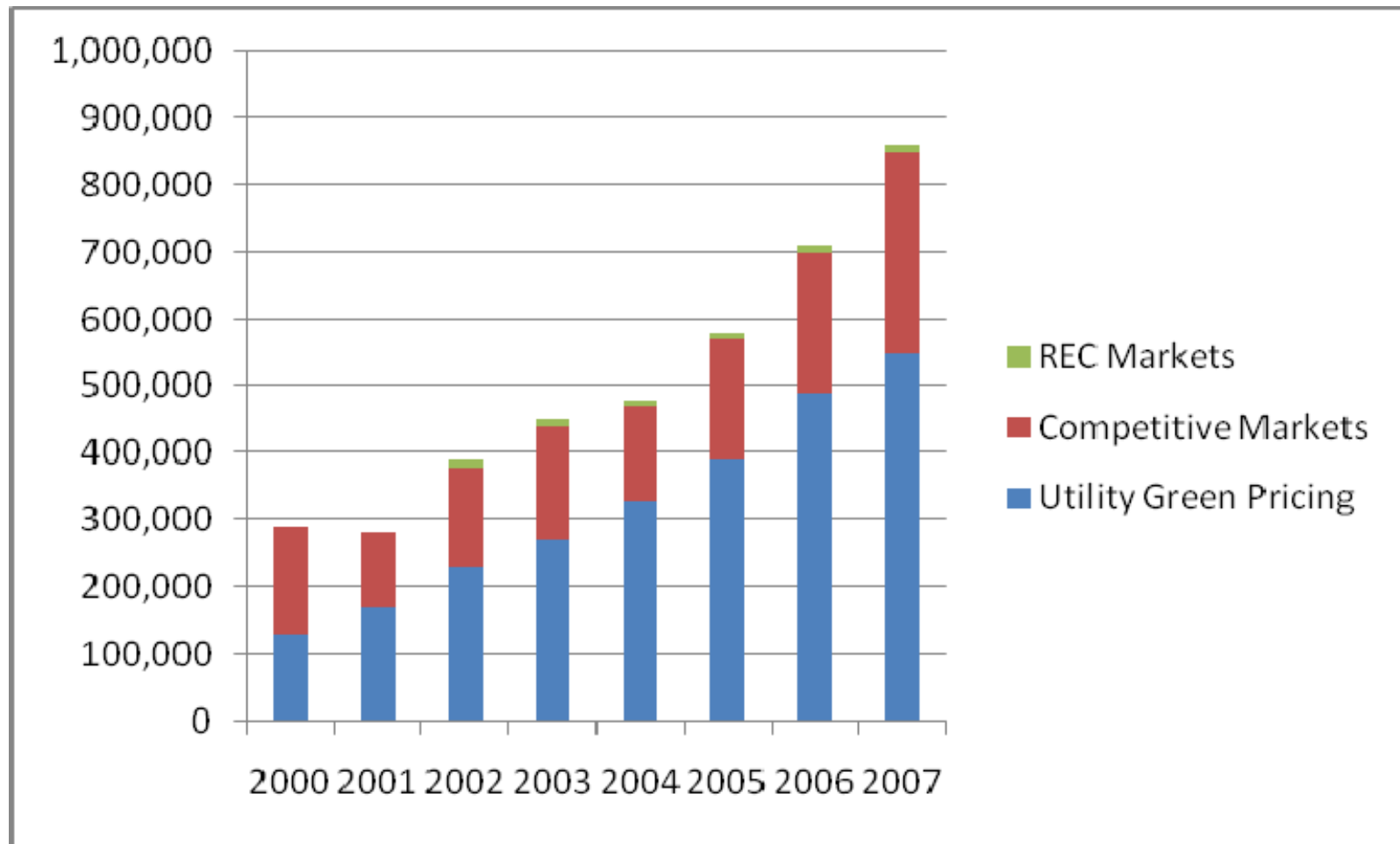


# GP Purchases by Customer Segment

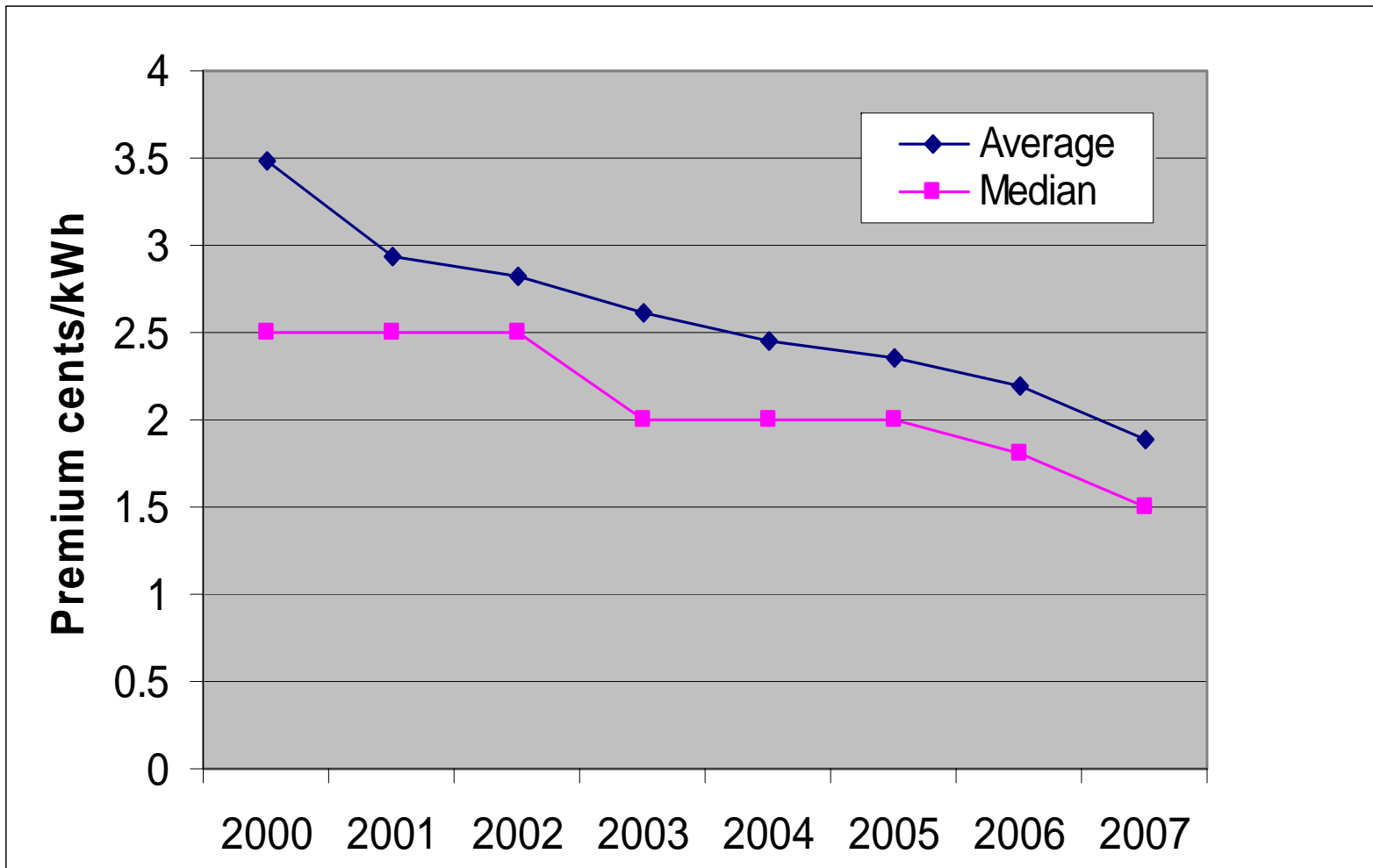




# Customer Participants by Market Type



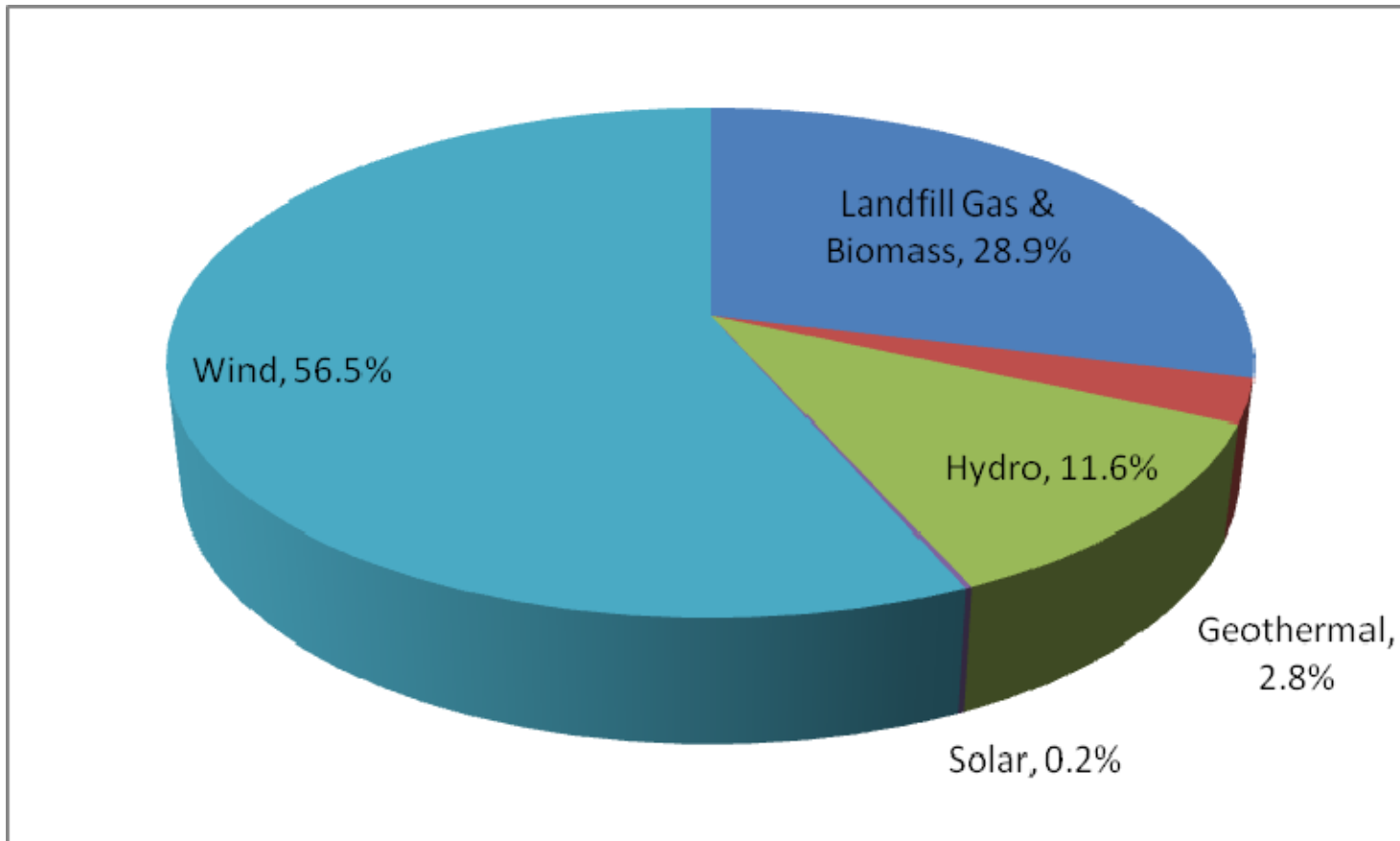
# Utility Green Power Premiums Decline



# Sources of Green Power

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## Voluntary market renewable energy supplies



# Key Issues Going Forward

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- Interaction with carbon markets
  - Will other regional cap and trade programs have set asides for the voluntary renewables market like RGGI?
  - RECs as offsets, continued controversy
  - Will federal cap and trade be adopted?
- What is the appropriate level of marketing costs, administrative costs, and transparency?
- Interaction with RPS, as policies ramp up
  - Competition for renewable energy supplies
  - Question of the need for voluntary markets
- Impact of the financial crisis on market participation