# Clean Renewable Energy Bonds: What They Are and How They Work

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1

# Clean Renewable Energy Bonds "CREBs"

- Contained in Energy Policy Act of 2005
- Designed as a substitute for Production Tax Credits
- Modeled after QZAB program for school funding
- Supported by NRECA and APPA



#### **Program Details**

- \$800 million authorized
- Issuers are any unit of government, tribes, REC's and "clean energy bond lenders" (Natl Rural Utilities CFC and Cobank)
   \$300 million set aside for RECs
- Proceeds must be used for renewable energy projects
   Based on IRS Section 45 definition (wind, biomass, etc.)
- Purchasers get tax credits instead of interest payments



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#### What's a CREB Worth to the Issuer?

- Depends on the project and how it's structured
- For "typical" community wind project:
  - Capital costs = \$1.3 million/MW
  - ➤ Principal repayment over 10 years
  - ➤ Average avoided interest expense @ 5%= \$37,500/year
  - Electricity generation @30% C.F. = 2.6 MM kWh/year
  - ➤ CREB subsidy = 1.4c/kwh vs. PTC of 1.9c/kwh + depreciation tax benefit



> Effective subsidy is lower if project is only partially financed with CREBs or if alternative financing costs are lower

### What's a CREB Worth to the Buyer?

- Rate set daily by U.S. Treasury
- Based on benchmark interest rates
- Current QZAB Rate is 5.6%
- Tax credit is treated as income and value reduced based on buyer's marginal tax rate



5

## **How to Apply**

Application requires:

- >project description
- ➤ independent engineer's evaluation
- ➤ financing plan



### **How Treasury Allocates Bonding Authority**

- Smallest to Largest
- \$300 million carve-out for electric cooperatives
- No additional technical review or comparison of project merits
- No assessment of credit-worthiness of project or issuer



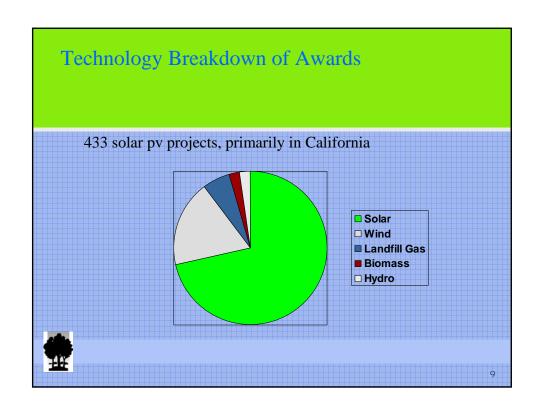
7

#### Results from 2006

- Way over-subscribed: 786 applicants seeking \$2.5 billion
- 610 projects awarded allocations from \$23,000-\$31 MM
- 30+ states
- Top states: CA, NM, MT, CO, MN



Diverse technologies



#### **Bad News/Good News**

IRS has been tight-lipped about the distribution of awards

But Congress has renewed the program for an additional \$400 million allocation this year...details to follow.



