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# Nuts and Bolts Clean Energy Muni Finance



UC Berkeley Renewable and Appropriate  
Energy Laboratory

Berkeley, California

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# Outline

- The Legal Basics
  - Palm Desert – The Assessment District Model
  - Berkeley – The Special Tax Model
  - Putting It All Together and Going to Scale
  - Outstanding Issues
  - Questions & Answers
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# Goals of Municipal Financing

- Financing cost administered through property tax bill
  - Little or no upfront cost to property owner
  - Tax/assessment obligation transfers with property
  - Benefited property serves as security (land secured)
  - Solar and energy efficiency
  - No personal credit
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# Municipal Financing Options

## Special Assessments

- Allow public improvements to be financed by selected parcels on a special benefit basis
- 1911 Act, Chapter 29 (AB 811) provides existing authority for “Contractual Assessments”
- Assessments are subject to Proposition 218 (Article XIID of the California Constitution)

# Municipal Financing Options

## Special Taxes

- Similar to Community Facilities District concept
- Berkeley used Charter Power Special Tax Financing Code
- SB 279 Pending
- Authorizes levy of special taxes to finance renewable energy/energy efficiency improvements

# Municipal Financing Options

## Chapter 29 vs. SB 279

- Chapter 29 available only to cities/counties; SB 279 would be available to all local agencies
- Chapter 29 subject to Proposition 218
- Chapter 29 is not available for “parcels which are undergoing development”
- SB 279 would allow third-party ownership and lease financing
- Neither would allow financing of PPAs



Rick and Wendy Clark. Palm Desert, California.

# AB 811

- City of Palm Desert sponsored the legislation
- Signed into law by the Governor on July 21, 2008
- Amended Chapter 29 Entitled "Contractual Assessments" Sections 5898.10 through 5898.32 of the Streets and Highways Code



## AB811 (continued)

- The amendment expanded the improvement work which may be financed to include:
  - “installation of distributed generation renewable energy sources and energy efficiency improvements that are permanently fixed to real property,” and
  - authorizes a participating property owner to “purchase directly the related equipment and material” and to “contract directly for the installation” of the improvements

# Palm Desert Process

- City began the lending program in September 2008
  - Loan rate 7.00% (no appraisal or credit check)
  - Loan terms (5, 10, 15 and 20 years) – Most loans 15 and 20 years
  - Portion of funding guaranteed for residential
  - No loan size limit (largest loan to date \$500k commercial)
  - Loans > \$60k need CM approval
  - No lender certification required
  - \$2.5mm of General Fund monies made immediately available (expanded to \$7.5mm in November 2008)
    - Approximately \$2.3mm loans funded to date, \$5.0mm in total commitments to date

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# Palm Desert Process (continued)

- General Fund not seen as permanent solution
  - DRALLC approached many commercial / investment banks to secure long-term funding
  - Renewable Funding approached the City for private financing option
  - City sent RFP to all interested parties and received responses in February 2009
    - No decision on RFP as yet
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# Available Financing Options

- General Fund loans (continue current program)
  - General Fund bond financing (Lease Revenue Bonds)
  - Land-Secured bond financing (no General Fund)
  - Commercial Banks
  - Private Funding
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Mayor Tom Bates and Jeanne Pimentel. Berkeley, CA.

# The Berkeley Structure

- City created citywide financing district with “opt-in” feature
- Property owners who want to participate agree to place special tax lien on property (unanimous consent)
- Special tax revenue stream creates security for investor purchasing bond
- Similar to Rate & Method of Apportionment exercise for tax formula

# The Berkeley Mechanics

- Each “project” treated separately for funding and financing purposes
- Interest rate to investor 6.75%
- All-in rate to property owner 7.75%
- Upfront program costs build into the financing
- Annual program expenses are estimated to be \$100 - \$125
- Typical \$25,000 system would have special tax of \$2,000/year (including program expenses)

# The Berkeley “Pilot”

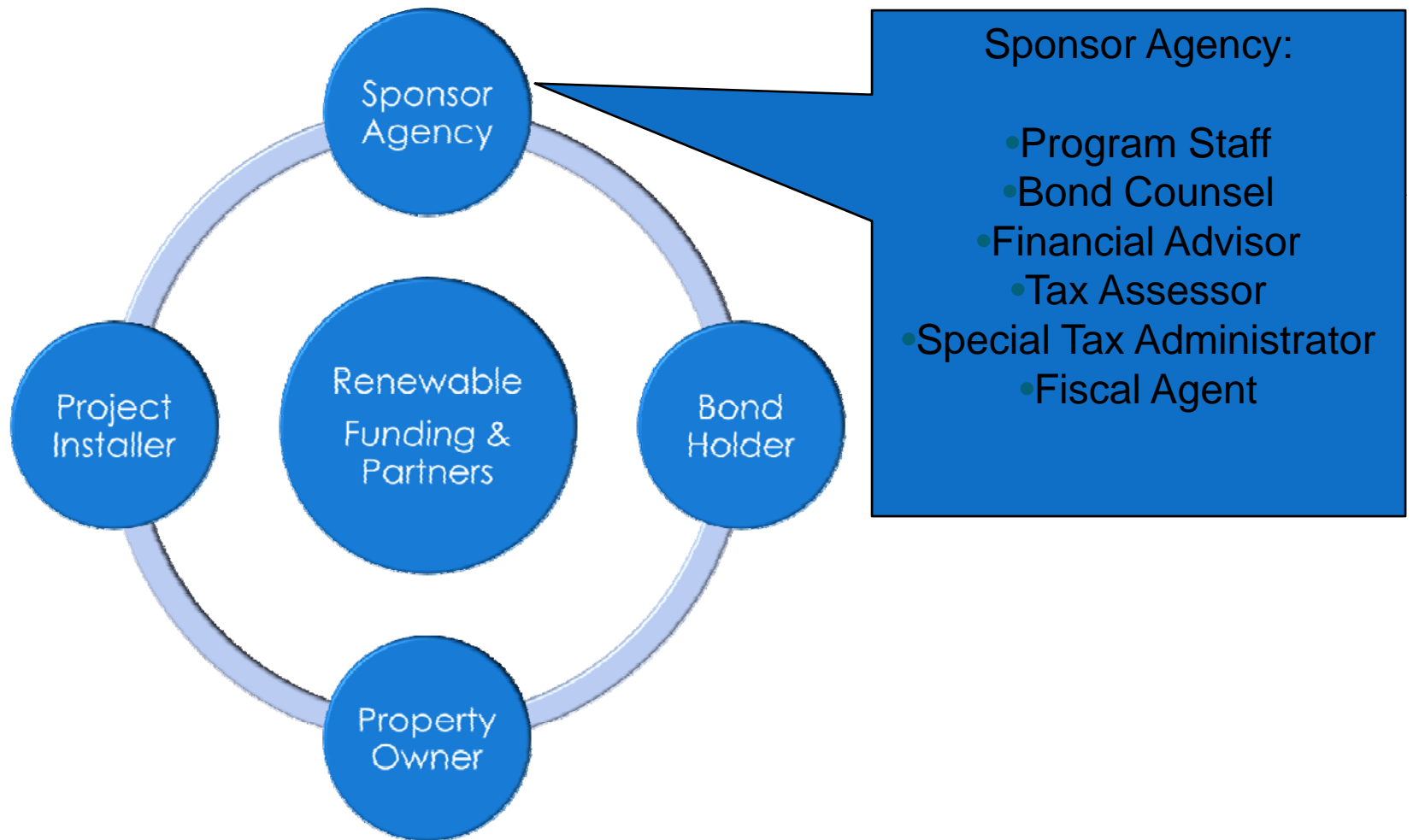
- Initial pilot program targeted 40 residential applications with a maximum funding commitment of \$1,500,000
- Photovoltaic systems only
- City’s objective was to flush out hurdles
- Outstanding issues include
  - Consistent Funding Mechanism – banks, investors
  - Do you “pool” all applications or fund individually?
  - Staffing requirements and financial impact on city budgets



# Putting a Program Together

- Line up expectations/ requirements/ timelines of stakeholders: property owners, cities, financial markets, installers/contractors
- Requirements for Scalable AB811 Program:
  - Administration/application process
  - Reliable regulatory scheme
  - Guaranteed on-demand funding for projects
  - Little cost to participating local governments
  - Near zero liability to participating local governments

# Coordinating the Various Stakeholders



# Using Technology for the Application Process

Property owners can learn about the program, apply and be funded through on-line portal

The screenshot displays the BerkeleyFIRST website interface. At the top left, the logo reads "BerkeleyFIRST Financing Initiative for Renewable and Solar Technology". A blue navigation bar contains links for "Learn More", "Apply Now", "Check Status", and "Contact Us". To the right of the navigation bar is a login section with fields for "Login Email" and "Password", and a "Go" button. Below the navigation bar is a large green banner with a tree and the text: "Go Solar with BerkeleyFIRST! Berkeley has launched a new tool to help property owners 'go solar' by financing the cost on property tax bills—no upfront cost, 20 year fixed interest rate, and debt transfers with the property." Below the banner are three columns of links: "Learn More »" (Finance your solar installation with the FIRST program.), "Apply Now »" (Five minutes to complete your application, approval within a week.), and "Check Status »" (Returning applicant? Log in and check your status.). To the right of the banner is a "New Users Start Here »" and "Login Help »" section. Below this is a "Welcome from the City of Berkeley!" message with a "Thank you for visiting Berkeley FIRST. We are very pleased to offer Berkeley property owners this exciting new way to 'go solar' without the upfront cost." and a "NEWS & UPDATES" section with two entries: "07.09.08 5.82% Interest Rate Fixed for 20 Years" and "10.26.07 Berkeley's Radical Solar Plan, San Francisco Chronicle »". At the bottom right of the main content area is a signature of Mayor David H. Barron. The footer contains the text: "Powered by Renewable Funding, LLC Financing Initiative for Renewables and Solar Technology".

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# Reducing Costs

- Administration Infrastructure
  - District Formation
  - Bond Issuance
  - Application Processing and Customer Service
  - Project Verification
  - “Risk”
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# Scaling Up

- Should programs be run at City, County-wide, regional or State-wide level?
  - Economies of scale
  - Reduced staff burden on participating cities
  - Local customization/ coordination
- Emerging Models
  - County-wide (Boulder, Sonoma)
  - California Communities JPA

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# California Statewide Program

- California Statewide Communities Development Authority
  - Joint Powers Authority of 350+ cities, 58 counties
  - Cities and counties “opt in” to CA program, but can customize/brand
  - Renewable Funding and RBC Capital Markets

# Outstanding Issues

- Legal
  - What constitutes public improvements?
  - Exercise of taxing powers
  - Senior lien to existing mortgages (lender consent?)
  - Prevailing wages?
  - Validation judgments
- Financial
  - Finding a reliable funding source
  - Consistent methodology and program structure
- Administrative & Public Policy
  - Relationship between property owner and installer
  - Solar vs. energy efficiency – residential vs. commercial
  - Regional solutions

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