PFM Environmental Finance

Santa Barbara County

Municipal Energy Financing Program

Analysis of Financial Implementation Alternatives

April 5, 2010

Public Financial Management
660 Newport Center Drive, Suite 710
Newport Beach, CA 92660

(949) 721-9422
www.pfm.com

Property Assessed Clean Energy

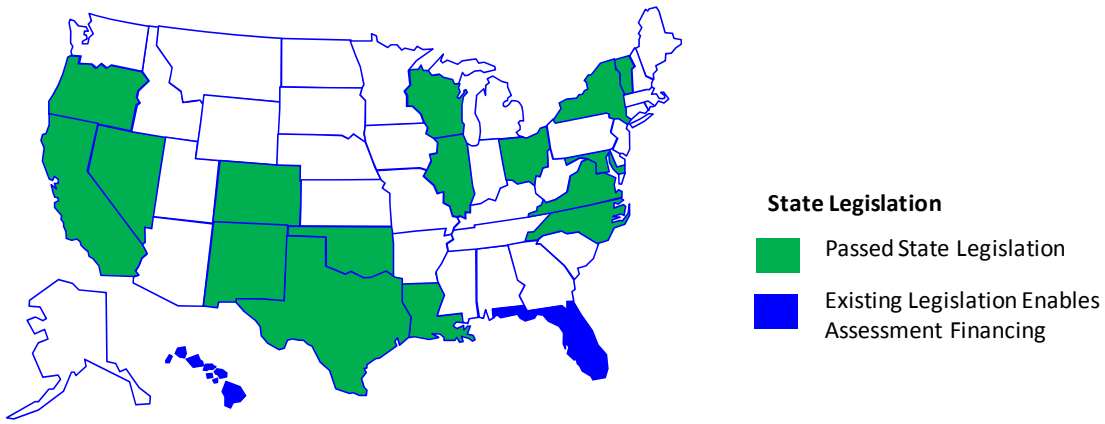
PACE or Property Assessed Clean Energy is a financing concept whereby residential and/or commercial property owners may finance the cost of specified and authorized energy (and in some cases water conservation) improvements. The cost of these improvements is then amortized on the property owner's property tax bill in the form of a special assessment or special tax. These assessments/special taxes may then be securitized into taxable debt securities.

PACE, as a financing concept, was most notably recognized by the White House in a special report dated October 18, 2009 (See Appendix I).

Typical elements of a PACE Program includes the following characteristics:

- Voluntary participation;
- Energy efficiency, water conservation and renewable energy generation upgrades must be permanently attached to the property to qualify. Items not permanently attached such as dishwashers and other appliances are not allowed. Improvements such as insulation, cool roofing, heating and air conditioner systems, waterless urinals, solar panels and energy efficient windows are generally acceptable;
- Improvements must be for existing buildings, in most cases (including California), new construction does not qualify;
- PACE assessments and taxes are a lien on the property itself; when the property is sold, the assessment or tax stays with the property; and
- Repayment is made through tax or assessment payments over time.

Since late 2008, 16 states: California, Colorado, Illinois, Louisiana, Maryland, Nevada, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Texas, Vermont, Virginia Wisconsin, and New York have enacted legislation authorizing PACE programs. In addition, home rule is generally thought to allow Florida and Hawaii jurisdictions to implement PACE without state legislation; however a statewide bill is currently in the second house of the Florida legislature in order to establish some statewide standards. Several additional states, including Arizona and Minnesota are in the process of considering PACE legislation.



In California, general law authorization for PACE programs was contained in AB 811, enacted in 2008. Additional legislative authorization including the ability to use PACE for water conservation was contained in AB 474, effective January 1, 2010. Programs in California are generally referred to as "AB 811 programs". For purposes of this report we will use the term "PACE" to describe these programs.

Some charter cities – Berkeley, San Francisco and San Diego – used their charter city powers to undertake special tax financing programs based on the Mello-Roos Community Facilities Act of 1982 (Mello-Roos Act). Two efforts to amend the Mello-Roos Act to allow PACE financing by general law cities were vetoed by the Governor.

Since the enactment of AB 811, it is accurate to say that nearly every major local or regional jurisdiction has considered PACE and many are in some form of program implementation.

First Movers

The first PACE program was implemented by the City of Palm Desert effective August 28, 2008. Approximately 184 properties, totaling $5.8 million were improved.

On November 1, 2008, as described above, the City of Berkeley, implemented its charter city special tax program, funded with approximately $1.5 million of private capital.

The Sonoma County Energy Independence Program debuted on March 25, 2009 and has been the most successful program to date, with over 1,100 loan applications totaling $39 million in the first nine months.

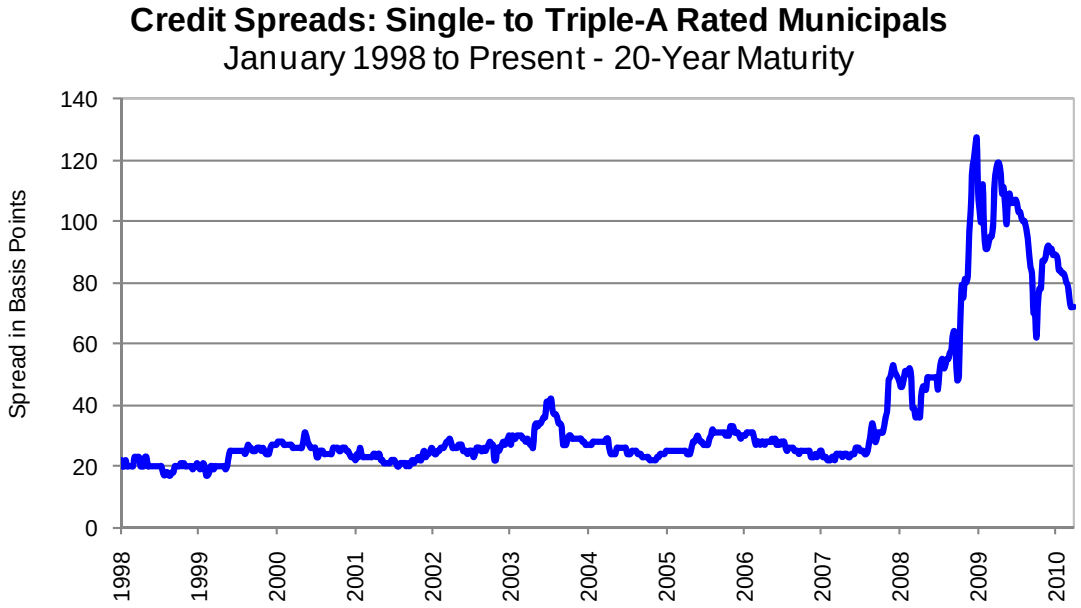
The Second Wave

Several California jurisdictions, like Santa Barbara County are in the process of implementing programs currently. These include the City of San Diego, County of Orange, County of Placer, Western Riverside County Council of Governments and City of San Francisco. A consortium of counties led by Sacramento applied for and received grant funding from the California Energy Commission to implement a multi-jurisdictional program to be undertaken by the California Statewide Communities Development Authority (CSCDA).

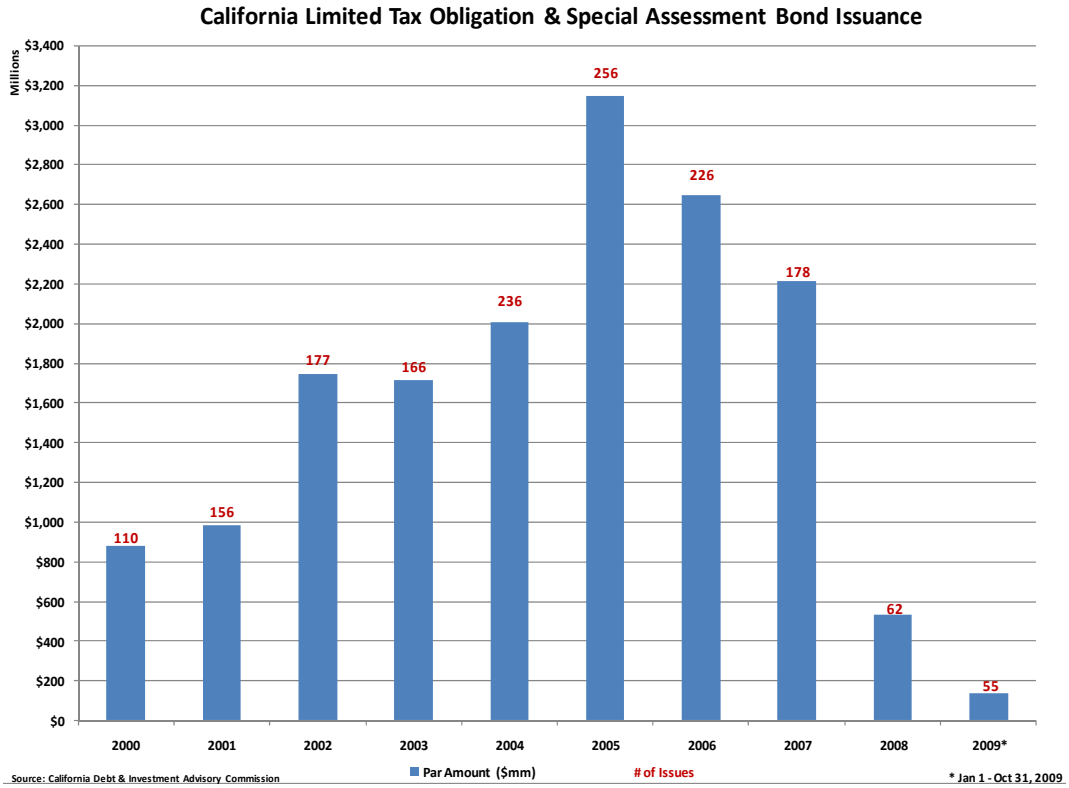
Lessons Learned from the First Movers

The primary focus for PACE programs is financing secured by the underlying property and serviced through special taxes or assessments on the property tax bill. This type of financing is often called "land secured debt." California has a well developed market for land secured debt which includes assessment bonds for water, sewer, road and similar improvements, along with Mello Roos Community Facility Districts. Even for unrated land secured debt, the market has historically been robust.

With the national financial crisis in September, 2008 however, the market experienced a significant disruption and the ability of local agencies to sell land secured debt declined markedly. The following table shows the relative spreads between a AAA obligation and A bonds:



Due to the widening spreads, as well as a complete halt to large-scale private development, the volume of land secured bonds diminished substantially as shown in the following chart:



In this market environment, the first movers (i.e., Boulder County, Colorado; Palm Desert; Berkeley; and Sonoma County) were faced with two choices: (i) pursue an aggregate financing approach (in which property owners received financing when there was enough volume to access the public finance marketplace), which would have the effect of delaying installations because property owners would most likely wait to install until financing was actually available (it was not possible to sell bonds in anticipation of property owners applying for financing because the financing costs would exceed the interest earnings on invested bond proceeds) and (ii) provide financing on a parcel-by-parcel basis, in which case traditional public financing was not available. Boulder undertook the aggregate financing approach while Palm Desert and Sonoma responded by providing internal funding on a parcel-by-parcel basis. Berkeley obtained third-party financing on a parcel-by-parcel basis, but the source of that funding is not widely available.

In the City of Palm Desert, the initial loans were funded with a loan from the city redevelopment agency. In order to repay the loan, the city negotiated a private placement with a bank. The loan is secured by city assets and is not characterized as an assessment obligation. The interest rate for homeowners is fixed at 7.0%.

In Berkeley, the city sold 13 “mini bonds” to a third party investor; it funded a debt service reserve fund with available internal equity. The City also agreed to pay delinquent special taxes from “available surplus funds” because it didn’t want to commit to early foreclosure on delinquent properties. The Berkeley program did not achieve a significant market penetration because (i) it only accepted 40 applications as part of a pilot program, (ii) some of the 40 original applicants were more interested in the concept than actually committing to pay for installation of solar panels, although others chose to finance their improvements with

lower-cost lines of credit, (iii) the City limited its financings to solar systems, which reduces the cost-effectiveness and utility of PACE financing from a property owner perspective, and (iv) the City did not expand its program beyond the pilot phase because it concluded that it did not make economic sense for a small-market agency to undertake a PACE program on its own. The City has subsequently decided to participate in the CSCDA program.

Sonoma County, clearly the most successful program in California – and likely the nation – to date, made a policy decision to encourage participation by funding loans with the proceeds of bonds sold to the County investment pool. Since Sonoma County views purchasing the obligations of entities within the County as a permitted investment, it is able to provide financing to program participants at a rate of 7%, and carries the bonds in the pool at a cost of 3%. The 4% spread is used to fund program expenses.

This has clearly been a successful approach to facilitate demand for the program, and to date there have been no reported defaults. However, Sonoma County reports that the 4% spread has not been sufficient to fund a debt reserve fund or to cover the costs of long-term debt issuance. In addition, market rates for taxable assessment bonds have moved higher than 7%, as discussed in the alternatives analysis and Appendix III. Therefore, Sonoma County has found it nearly impossible to fashion a refunding strategy to move these bonds out of the County pool, without the pool taking a loss. We will discuss this dilemma in greater depth further on in the report.

Summary Observations

The lessons we have observed in reviewing the first mover programs is that sponsoring agencies must develop a strategy to attract third-party investors, or, if they are going to fund the PACE financings internally, have a clear strategy to achieve the ultimate long-term financing. If this long-term financing strategy is not in place, agencies must be willing to provide financing and subsidies over an extended period of time (Sonoma) to bring down the cost of capital for program participants and ensure program sustainability.

Programs that are sold on the policy benefit of funding renewable energy, without a clear understanding of how and when a financing will work, are at risk. Public Financial Management, a professional investment advisor to local governments, would be particularly concerned about the implications of holding non-rated, long-term municipal assessment debt in the Treasury Investment Pool. Investment managers are held to a fiduciary standard to achieve safety, liquidity and yield (in that order). Accordingly, risks associated with any program or investments should be fully quantified and disclosed to policy makers prior to implementation. Financial programs should be designed to minimize these risks.

Subsequent programs in California have been built around an assumption of grants (San Diego), or a financial solution requiring assessment based debt (San Francisco, CSCDA, Western Riverside County and Orange County) to be placed with third-party investors. San Francisco is pursuing two independent tracks. The first: selling $10M of bonds to a newly formed PACE program outsourcing firm, Renewable Funding (RF), and allowing RF to remarket when sufficient principal has been originated. The second: aggregating large building financings into going away bond financings to the public market. Placer County has launched a program based on the County of Sonoma's model.

Bonds or Debt?

In considering the initial capitalization of its PACE program, the Santa Barbara County will face a threshold choice of using grants or debt, or attempting to combine the two.

Grants, either through the California Energy Commission block grant program, or direct from the United States Department of Energy are attractive options, but can come with significant limitations.

First, there is a limited amount of grant funds available and no assurance of program funding. Even if grant funding is achieved, there is no guarantee of future funding as the program expands. Secondly, grants carry significant policy constraints, such as a requirement for some properties to pay federal prevailing wages[1], mandated energy audits and energy savings thresholds that may not work with all types of energy improvements. For example, State and federal "loading order" requirements have targeted achievement of a 10% reduction in energy use through energy efficiency improvements (i.e., insulation, HVAC, windows), prior to the installation of renewable energy systems (i.e., solar photovoltaic) .

Federal Programs
In 2009, the United States Department of Energy issued a solicitation under its Competitive Energy Efficiency and Conservation Block Grant program in the amount of $454 million. The program was to fund local PACE style programs for the following purposes:

- Reduce fossil fuel emissions in a manner that is environmentally sustainable
- Reduce the total energy use of the eligible entities
- Improve energy efficiency in the building, transportation and other appropriate sectors
- Create and retain jobs
- Stimulate the economy

Approximately eight-to-twenty awards were anticipated with the goal of leveraging Federal dollars on at least a 5:1 ratio. Grant sizes were anticipated to be $5-$75 million. This program is also known as "Recovery through Retrofit".

In addition to this direct grant program, the DOE awarded states block grants that were to provide upfront capital for statewide PACE style programs. This includes California which received and subsequently awarded approximately $30.17 million under this program.

The attached October, 2009 Report of the Council on Environmental Quality entitled "Recovery through Retrofit" (Appendix II) summarizes the Federal government policy objectives for PACE and related renewable energy and energy efficiency financing programs.

The US DOE also administers the Federal Loan Guarantee for Commercial Technology Renewable Energy Generation Programs. This program provides loan guarantees for

[1] PACE programs in California do not trigger state prevailing wage laws; however, the use of grant proceeds to establish a debt service reserve fund or as a financing source are likely to trigger prevailing wage.

renewable energy financing projects. The County of Orange has applied for loan guarantees to support its PACE program efforts. This program is designed for large, government administered programs and is only available for solar panel type generation improvements, not routine energy efficiency improvements such as HVAC, weatherization, or water conservation.

State Programs

In 2009, the California Energy Commission, using $30.17 million in Federal block grant funds, under the American Recovery and Reinvestment Act (ARRA), solicited proposals to provide funding for Municipal Financing Programs under its Program Opportunity Notice #400-09-401. The program guidelines for the Municipal Financing District Program (the PACE component of the state program) allowed the following uses for program funds:

- Establishing a loan loss reserve
- Paying for program start up costs
- Paying for ongoing program administration costs
- Interim financing (warehouse line of credit)
- Interest rate buy-down
- Interest rate insurance which may include an interest rate collar
- Homeowner grants for low income homeowners or energy efficiency retrofits

A 1:1 matching component was included in the program and improvements must be permanent improvements and meet designated state Energy Commission efficiency standards.

The program requires participants to conduct an energy audit prior to program participation and documentation of energy savings.

The following PACE programs were funded through the state Energy Commission grant program on February 10, 2010.

California Energy Commission Funded Pace Programs

Jurisdiction	ARRA Funds Awarded
Sacramento County/CSCDA	$16,499,050
County of Humboldt	4,384,349
City & County of San Francisco	2,080,000
County of Sonoma	2,537,000
City of Los Angeles	4,676,513

Santa Barbara County was not funded but was ranked first among those projects not selected for funding.

Clearly grant funding is a preferable alternative from a cost perspective. However, the uncertainty regarding the receipt of grants, the program limitations and additional costs, such as mandatory energy audits or (for some properties) federal labor standards, along with the lack of an ongoing funding element make grants unsuitable for a flexible program with broad policy objectives.

Accordingly, we will examine ways in which a PACE program may be financed in the capital markets.

Bonds

There are a multitude of public finance approaches that could be used to implement a PACE program. However, the unique aspects of the program require the use of specific structures and techniques.

Because the improvements funded by PACE are to the benefit of private property, and because the PACE assessments or special taxes are considered private payments, PACE bonds must be taxable.

Next, because these are secured by a lien on the underlying property through the assessment (or in some cases, a special tax), the type of bond to be used is a Special Assessment Bond (or in some cases - Special Tax Bonds).

Land secured financing – including special benefit assessments and Mello-Roos special taxes – have been widely used in California for many years. Special provisions exist in State law to facilitate these financings: the 1913 and 1911 Acts are used to levy assessments; the bonds are typically issued under the 1915 Act. These assessment laws and the Mello Roos Act allow for land-secured financing for a variety of public purposes including infrastructure, schools (Mello-Roos only), parks, utility undergrounding and similar improvements. Land-secured bonds are secured by a special tax or a special benefit assessment which is generally levied in relation to the benefit a property received from an improvement.[2] The tax or assessment is not based on the actual value of the property, and therefore, debt burden, measured as a percent of the market value of a parcel, can vary greatly from one parcel to another.

Because the land secured market is highly developed, the rating agencies have developed specific criteria to achieve investment grade bond ratings. These are explained below, and are pertinent to PACE programs in California.

Criteria Analyzed for Rating Agency Credit Determination

Standard & Poor's has identified the following credit criteria for Special Assessment debt.

District Makeup and Economic Base
Rating Agencies will analyze employment levels, wealth indicators, regional trends on payment of assessment taxes, and taxpayer concentration. In general, the more "developed" or "built-up" the area where the special assessment will be taking place, the more favorable the rating.

[2] Mello-Roos special taxes are not subject to the same constitutional restriction on "special benefit" faced by special assessments, but there must be a "reasonable basis" for the apportionment of the special tax to a particular property.

Method of Assessment Collection
Incentives that improve the probability of receipt of payments for servicing debt are generally viewed as positive by the rating agencies. (i.e.: discounts for early payment and penalties for delinquent late payments). In terms of collection mechanisms, the rating agencies prefer that assessment taxes be collected with ad valorem property taxes.

Value to Debt Ratios
High property value-to-debt ratios are viewed favorably. A ratio value of seven is the general threshold to be deemed investment grade. The marketability of the property is also evaluated as it improves the chances that a replacement homeowner can be found quickly if needed and not disrupt the collection of assessments. All value-to-debt ratios are performed on an individual property basis since taxes typically cannot be increased to compensate for delinquent taxpayers.

Lien
A lien on parity with or ahead of ad valorem taxes is desirable; the general property tax bill and special assessment tax bill should be combined into one bill to facilitate collection.

Treatment of Property Sales
Liens that remain in place and are inextricably linked to the property are considered best practice.

Foreclosure/Bankruptcy Provisions
A plan should be in place to provide recourse if a foreclosure or bankruptcy should occur regarding the timely payment of debt service. The marketability of the property is of particularly concern regarding foreclosure or bankruptcy as it will dictate the ability to resell the property and attain a replacement assessment taxpayer.

Clear Right to Issue
Public hearings and deadlines for discussion are necessary, within legal requirements, so as to eliminate the potential for legal challenges subsequent to the offering of bonds. In all cases so far in California a validation action has been initiated prior to any AB 811 debt being issued. It is our understanding that Santa Barbara County will judicially validate its program.

Term and Redemption of Bonds
The debt service schedule should be level or declining over time and should be within the useful life of the project and improvements.

Debt Service Reserve Fund
A Debt Service Reserve Fund enhances the credit as it ensures the timely payment of debt service payments in the event assessment taxes are substantially delinquent or cannot be collected. The amount of funding for the reserve fund and the method of funding are important as it should be sized and structured to provide timely payments at all times.

Sensitivity Analysis
Tests that determine the structure's credit and repayment strength come in the form of cash flow stress-testing to determine the ability of the structure to withstand payment delinquency amongst the largest taxpayers.

Summary of Rating and Credit Requirements
In general the credit strength of a special assessment tax debt issue is the most dependent on the homeowners' ability to make annual assessment or tax installments and the marketability of the property once the special assessment or tax is levied. It should be noted that the credit strength of a debt issuance may be enhanced by the issuer's ability to quickly raise funds to cover delinquent assessment or tax installments and to have procedures and instruments in place to mitigate the risk of delinquent payments (i.e.: Debt Service Reserve Fund and Foreclosure/bankruptcy procedures.) Bond financing of this nature are best suited for developed areas as property values will be less speculative and the stability of the region will contribute to the credit strength of the bonds. Since PACE improvements are made to existing properties, this is considered a credit strength.

In today's environment, we believe it is essential to obtain a minimum investment grade bond rating prior to accessing the public capital markets. The minimum investment grade rating is BBB from Standard and Poor's and Baa from Moody's.

Capitalized Interest

Assessment bonds are unique in another way in that there are specific dates and procedures that must be met to ensure the assessment is properly placed on the actual tax bill. Generally, a tax roll must be presented to the county auditor-controller in July or August to ensure the tax is on the tax bill paid by the homeowner in December and April. Additional timing deadline procedures may be required on a local basis to respond to specific process requirements.

Accordingly, an important security provision of assessment bonds would be pre-funded capitalized interest to fund the bonds' first payments until collections can catch up with the debt service schedule.

Risk Allocation
Assuming that the underlying security is the assessments on individual homeowners, it is possible for Santa Barbara County to improve the pricing and thus lower the annual assessments on the bonds through how it allocates risk, or more specifically by how much risk for potential defaults it may be willing to accept itself.

In the case of Boulder County, Colorado, the county supported its PACE assessment bonds with a "moral obligation". This is a relatively weak extension of the county's general credit to the bonds. Should, however, the county default on its moral obligation, it would expect negative ramifications from its future debt purchasers, thus providing a compelling argument (from the bond owner perspective) for backstopping the assessment debt with county funds. In California, a "moral obligation" would involve an agreement by a local agency to consider using "available surplus funds" to make up for any tax or assessment delinquencies.

Another option, used by Palm Desert, is to transfer the risk of default to the local agency. Palm Desert sold an obligation payable from the city's general fund in the public market, and reimburses the general fund with contractual assessment installments.

In Sonoma County, the county pool assumed the risk of property owner default by selling the assessment bonds to the county investment pool. Thus any losses through default will be booked as investment losses rather than debt service costs. Again in this case, the

county is assuming risk of nonpayment until the time it is able to place the debt in the capital markets away from the pool.

Financing Alternatives

To measure the impacts of these various approaches on both Santa Barbara County and program participants, we have developed a variety of scenarios (summarized in the table below, and detailed in Appendix III).

All of the analyzed alternatives have been designed to produce $15,000,000 in proceeds at closing. The ”par size” or the actual price of the bond issuance that is needed to yield $15,000,000 in financing for program participants varies, depending on the structure and underlying credit of each alternative, as well as market conditions. We have assumed that the first interest payment is capitalized as part of the bond offering. Bonds were all assumed to have a 15 year maturity. We have used the same interest rate earnings assumption (0.28%) for the capitalized interest account. We have also used the same reserve fund interest earnings assumption of 3.56% for all scenarios as appropriate.

The actual maturity for Santa Barbara PACE debt should reflect the useful life and nature of the assets to be financed. Solar PV improvements and some large energy generation projects can be financed over 20 years. Smaller weatherization and HVAC improvements may be as short as five years. The maximum maturities of QECBs are determined by the US Treasury Department on a daily basis and are currently 16 years.

Cost of issuance to recover financing, legal and administrative costs were assigned at a range of 3.5% -1.64% to reflect expected bond costs relative to the presumed credit quality and structure.

To determine the impact of each financial option on individual homeowners, we assumed a $25,000 per household borrowing. This would equate to 600 individual parcels in each financing. Costs were then spread among the participants on a pro rata basis.

The first alternative, or base case, assumes an investment grade (BBB) assessment bond, with no additional county provided credit support. This required a total par size of **$18,230,000**. The All-in True Interest Cost (TIC) is estimated at **7.648%**.[3] This alternative would result in a repayment obligation of the homeowner over 15 years of **$44,961** or an average annual payment of **$2,997** for financing $25,000 in improvements.

All-in TIC is the weighted average interest cost of the debt; adjusted to reflect the amortization of the cost of issuance (this does not include capitalized interest or the debt service reserve fund). Ultimately, the All-in TIC is the rate that program participants will pay under current market conditions to ensure that administrative costs, including the costs of issuance, can be covered. As an example, the weighted average interest rate for the base case is 7.097%, and after adjustment to reflect costs of issuance, the All-in TIC is 7.64%. Given that markets are constantly changing, close attention should be paid to prevailing

[3] Note: all estimated interest costs are as of market conditions on March 26th, 2010 and are spread to a published index. The actual market conditions may reflect a higher level of investor concern and thus spread at a greater level to these market indicators

trends to ensure that appropriate rates are offered to program participants, if one of the goals of the program is to minimize ongoing impacts to the general fund.

Our second alternative assumed a "moral obligation" backing by the county. This had the result of increasing the estimated bond rating to "A3" and reducing the estimated All-in TIC cost to **7.038%**. This option produced a par size of **$18,140,000**. Total net payments were **$42,921** and the average annual payment was **$2,861**.

The third alternative assumed that the County backed the debt from all available resources and achieved a rating of "A1". Costs of issuance were reduced from 3.5% to 3.0% to reflect the more conventional structure. A par size of **$17,990,000** was required to produce $15,000,000 of net proceeds. This alternative produced an estimated All-in TIC of **6.701%** and total payments for the property owner of **$41,817** or **$2,788** annually.

In order to provide some context for comparison, we next assumed a "bond" that was sold to the treasury investment pool, yielding 7.0%. We reduced cost of issuance to 1.75% but maintained a debt service reserve fund. The resulting All-in TIC for this approach was **7.267%** with total net debt service of **$43,737**. The estimated annual assessment would be **$2,916**. A total loan of **$17,895,000** was needed to provide the required proceeds.

We understand that the County would be limited to holding the obligations for no more than five years in the Treasury Investment Pool. While we could structure an obligation with a twenty year amortization and five year "put" or option to sell back the security to the issuer, we cannot address the issues of interest rate and market access risk in order to present a strategy that could be effectively implemented with a five year limitation.

Qualified Energy Conservation Bonds

A variation to typical municipal bonds is a recent structure called Qualified Energy Conservation Bonds or QECBs. QECBs were originally authorized in 2008 and the authorization was increased to $3.2 billion nationally in the American Recovery and Reinvestment Act of 2009 (ARRA). Among the authorized uses of QECBs are "implement green community programs" and "renewable energy facilities."

QECBs were originally structured as tax credit bonds, in which investors received tax credits. However, there is not an established market for bond owners interested in tax credits. As a result, QECBs and other similar tax credit bonds were attractive only to certain large bank institutions on a private placement basis.

Effective March 18, 2010, the Hiring Incentives to Restore Employment Act (HIRE Act), modified the QECB structure to allow them to be issued as taxable interest-bearing bonds (without providing tax credits to holders); the tax credit has been converted to a direct payment subsidy to be made on a semi-annual basis by the federal government to the local agency. This allows QECBs to mirror the much more popular Build America Bonds (BABs) and opens the bonds to a much wider potential investor base (any investor interested in owning taxable municipal bonds). Under this structure, the issuer sells taxable bonds, and receives a subsidy from the US Treasury equal to 70% of the lesser of the US Treasury credit rate or the taxable coupon on the bonds. This would suggest an effective borrowing cost adjusted to 3.565% on an All-in TIC basis – by far the most cost-effective option, when compared to other analyzed scenarios.

It should be noted that while tax subsidy bonds (BABs) have become very popular and cost efficient for state and local governments, indeed 2010 is expected to see a record issuance of BAB-style bonds, they carry a unique risk that issuers could be shorted by the Federal government in terms of the Federal subsidy. This is because the Federal government may take the position that it can withhold from bond subsidies or "offset" any amounts due to the Federal government by the participating local issuers. For this reason, both the states of Florida and South Carolina have announced in March, 2010 that they are suspending further issuance of direct subsidy bonds (BABs).

QECB bonds face certain limitations that make them less attractive than BABs. First, they are subject to state allocation of bond authority, and Davis Bacon labor standards (i.e., prevailing wage) must be applied for QECB funded projects; this may increase the costs for property owners and/or contractors. In addition, a debt service reserve fund cannot be funded with QECB bond proceeds, there is a 2% cost of issuance limit, and interest can be capitalized only for the construction period. Santa Barbara County has reserved its $4.2 million in QECB authority and is prepared to request additional allocations from the California Debt Limit Allocation Committee, due to the fact that some jurisdictions are not interested in this structure.

Assuming sufficient allocation of QECB authority to the county, a par size of **$17,415,000** would result in an All-in true interest cost of **3.824%** and a total aggregate assessment of **$36,049**. The average annual next assessment would be **$2,403**.

Detailed financing alternatives for each option are included in Appendix III.

The summary results of our analysis are shown on the following chart:

County of Santa Barbara
Summary of Financing Alternatives

Scenario Label:	A1	A2	B1	C1	C1a	D1	E1
Scenario Name:	Taxable Assessment Bonds	Taxable Assessment Bonds - Cash Funded DSRF	Enhanced Taxable Assessment Bonds	General Fund Secured Debt	General Fund Secured Debt - Federal Loan Guarantee	5 Year Treasury Invst. Pool	Qualified Energy Conservation Bonds (BAB Structure)
General Pledge:	Stand-Alone Credit	Stand-Alone Credit	Moral Obligation	Assessment Bond	Assessment Bond	Treasury Invst. Pool	Stand-Alone Credit
Projected Credit Rating:	BBB	BBB	A3	A1	AAA	N/A	BBB
Tax-Status:	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable Project Fund Build America Bonds Taxable DSRF & CAPI Bonds
Bond Type:	Par Bonds	Par Bonds	Par Bonds	Par Bonds	Par Bonds	Par Bonds	Par Bonds
Settlement Date:	3/1/2011	3/1/2011	3/1/2011	3/1/2011	3/1/2011	3/1/2011	3/1/2011
First Interest Date:	11/1/2011	11/1/2011	11/1/2011	11/1/2011	11/1/2011	11/1/2011	11/1/2011
First Maturity:	5/1/2012	5/1/2012	5/1/2012	5/1/2012	5/1/2012	5/1/2012	5/1/2012
Final Maturity:	5/1/2026	5/1/2026	5/1/2026	5/1/2026	5/1/2026	5/1/2016	5/1/2026
Term:	15 Years	15 Years	15 Years	15 Years	15 Years	5 Years	15 Years
Par Amount:	18,230,000	16,255,000	18,140,000	17,990,000	16,060,000	17,925,000	17,415,000
Project Fund:	15,000,000	15,000,000	15,000,000	15,000,000	15,000,000	15,000,000	15,000,000
Costs of Issuance (%):	3.50%	3.50%	3.50%	3.00%	3.00%	1.75%	2.00%
Costs of Issuance ($) [1]:	638,050	568,925	634,900	539,700	481,800	313,688	348,300
Debt Service Structure:	Level	Level	Level	Level	Level	Level	Level
Debt Service Reserve Fund Test:	Lesser of 3 Test	Lesser of 3 Test	Lesser of 3 Test	Lesser of 3 Test	None	Lesser of 3 Test	Lesser of 3 Test
Debt Service Reserve Fund Deposit:	1,823,000	1,625,500	1,814,000	1,799,000	0	1,792,500	1,741,500
Debt Service Reserve Fund Investment Rate [2]:	3.56%	3.56%	3.56%	3.56%	N/A	1.64%	3.56%
Capitalized Interest Period:	Interest Through 11/1/2011	Interest Through 11/1/2011	Interest Through 11/1/2011	Interest Through 11/1/2011	Interest Through 11/1/2011	Interest Through 11/1/2011	Interest Through 11/1/2011
Capitalized Interest Fund Deposit	766,560	683,566	687,760	650,553	573,836	815,379	318,187
Capitalized Interest Fund Investment Rate [3]:	0.28%	0.28%	0.28%	0.28%	0.28%	0.28%	0.28%
Scale:	MMD Taxable BBB	MMD Taxable BBB	MMD Taxable A	MMD Taxable A	MMD Taxable AAA	7.00%	MMD Taxable BBB
Spread:	100 bps	100 bps	100 bps	75 bps	24 - 63 bps	0 bps	100 bps
Aggregate Costs of Issuance [4]:	3,227,610	2,877,991	3,136,660	2,989,253	1,055,636	2,921,567	2,407,987
Average Life:	9.406	9.407	9.294	9.248	9.175	3.325	8.745
TIC:	7.097%	7.098%	6.497%	6.244%	5.917%	6.991%	6.991%
All-in-TIC (Net of Federal Subsidy):	7.648%	6.146%	7.038%	6.701%	6.370%	7.608%	3.824%
Federal Subsidy Rate:	N/A	N/A	N/A	N/A	N/A	N/A	70% of Interest
Total Debt Service:	30,551,668	27,244,128	29,235,034	28,512,299	24,906,020	22,097,175	28,213,803
Total Net Debt Service:	26,976,378	25,681,624	25,752,551	25,090,191	24,331,113	19,335,889	21,629,651
Average Annual Net Debt Service:	1,798,425	1,712,108	1,716,837	1,672,679	1,622,074	3,867,178	1,441,977
Present Value of Net Debt Service [5]:	15,700,953	14,520,915	15,015,832	14,640,386	13,779,048	15,474,356	12,277,781
Assumed Homeowner Loan Amount:	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Assumed Number of Homeowner Loans:	600	600	600	600	600	600	600
Aggregate Costs of Issuance / Loan [4]:	5,379	4,797	5,228	4,982	1,759	4,869	4,013
Average Annual Amortization of Aggregate Costs of Issuance / Loan [4]:	359	320	349	332	117	974	268
Total Debt Service / Loan:	50,919	45,407	48,725	47,520	41,510	36,829	47,023
Total Net Debt Service / Loan:	44,961	42,803	42,921	41,817	40,552	32,226	36,049
Average Annual Net Debt Service / Loan:	2,997	2,854	2,861	2,788	2,703	6,445	2,403

(1) Costs of Issuance includes Underwriter's Discount
(2) SLGS rate that corresponds with average life of issuance
(3) 8 month SLGS rate (length of capitalized interest period)
(4) Aggregate Costs of Issuance is the sum of Costs of Issuance, Debt Service Reserve Fund Deposit and Capitalized Interest Deposit
(5) Net Debt Service for all scenarios is present valued at the All-in-TIC of Scenario A1 (7.648%)

Note: QECBs and Federal loan guarantees trigger prevailing wage requirements.

Bond Structure and Pricing for Financing Alternatives

The objective of any financing strategy should be to provide the lowest cost of participation to the homeowner while at the same time, managing the risk to the County as the issuer of the debt (or investor in the County pool approach).

Costs to the homeowner are a function of the net cost burden of participating in the program and the interest rate component of debt service. Risk to the County is expressed by either the amount of appropriated funds at risk, the amount of potential investment losses (if held in the County pool), or the likelihood that the County would have to use general funds to make a bond holder payment in the event assessment revenues were insufficient.

QECBs

In reviewing the potential options, QECBs are by far the most cost effective option from the perspective of the homeowner, depending upon the impact of imposing Davis Bacon prevailing wages. Lower net interest rates due to the 70% federal subsidy are the key element in achieving this result. In our analysis, we have assumed capitalized interest and a funded reserve fund as material to the credit structure of the bond; these would have to be funded from either a "taxable tail" (a taxable, non-QECB bond sold concurrently with the QECB) or with a cash deposit from other available moneys (e.g., grant funds). The lower interest rates result in both lower capitalized interest and lower reserve requirements.

Santa Barbara County has reserved its $4.2 million QECB allocation and has indicated it will apply to the California Debt Limit Allocation Committee for additional allocation from the "turn back" from other jurisdictions. While the use of QECBs presents the lowest risk option for the County, when compared to other options, it is not clear if sufficient QECB allocation can be obtained to sustain a viable program in Santa Barbara County. Nonetheless, we would recommend that at least one tranche or round of the program be funded with the current $4.2 million QECBs allocation (it may be that, at a minimum, commercial property owners are already paying wages consistent with Davis Bacon prevailing wage requirements and that a tranche of QECBs can be issued to finance improvements to commercial properties).

Impact of the Reserve Requirement

In alternative A2, we tested an approach whereby the debt service reserve requirement would be cash funded by the County (not with debt proceeds). This effectively means that the County would provide a cash subsidy to a property owner in an amount equal to the reserve fund deposit. This option improves savings to the homeowner; moreover, the interest earnings on the reserve fund would accrue to the County, providing an offsetting revenue source and, when the property owner ultimately pays off the contractual assessment, the reserve fund would return to the County, and could be used for the next program participants.

Funding for a reserve can come from state or federal grant resources or from designated appropriated County resources. A reserve requirement of $1.625 million would leverage a transaction of $16,255,000 or approximately 10:1 leverage. We recognize the challenge in providing funds to be used in this manner, particularly in a resource-constrained environment; however, this application would be an effective strategy to lower the costs and support with the sustainability of the program.

Federal Loan Guarantees

A relatively new conceptual approach is the use of the US Department of Energy loan guarantee program to enhance the credit of the underlying bonds. The guarantee would apply to 80% of the borrowing. For this scenario (C1a), we assumed that a reserve fund would not be required. Substantial economic benefit as noted above is achieved by this change. It is our estimation that a federal guarantee would reduce the borrowing cost by approximately 128 basis points over an unenhanced BBB assessment bond.

We would note that the program rules for a federal guarantee are not fully developed; Davis Bacon provisions would attach and it has not be determined with certainty that the guarantee would actually result in a AAA credit.

Qualifying for Federal loan guarantees is a complicated and difficult undertaking. We recommend the likelihood of success be appropriately evaluated prior to pursuing this approach. In addition, the loan guarantee program would limit the types of eligible improvements to solar generation and thus this is most appropriate for larger commercial and residential projects.

Use of the County Treasury Investment Pool

In alternative D1, we sized loans from the Treasury Investment Pool to reduce bond issuance costs, but we maintained sizing for a debt service reserve fund and capitalized interest. Here we assumed the 7.0% loan rate used by Sonoma County. We were surprised that this option did not perform better. Estimated costs were actually higher than a federally insured, QECB or general fund-backed security. This is a function of the interest rate and reserve requirement. Should the Treasurer decide to lower the rate, or to purchase this security without a reserve requirement, then the costs would be substantially lower. Doing this however would greatly reduce the potential of placing this debt with a third party investor and would expose the County to potential losses in its Treasury Investment Pool.

When we sized this transaction for a five year maturity, as shown in the table, the annual assessment cost to the homeowner increased from an estimated $2,916 to $6,445. We therefore do not believe a five year maturity is a viable option from the perspective of the homeowner.

Enhanced Taxable Assessment Bonds

We developed two scenarios that assume some level of County credit support for the assessment bonds. The first assumed a “moral obligation” sufficient to move the bonds to a rating of A3. This reduced the expected borrowing costs by an estimated 61 basis points, which reduced the averaged contractual assessment by approximately $136 per year. We would note that there is no established template for a “California Moral Obligation” bond and the market for such an instrument in today’s fiscal climate is unknown.

Our second scenario assumed that the County stood behind the debt with its general obligation COP ratings of A1. This approach reduced expected borrowing costs by 95 basis points and reduced the expected annual assessment costs by $209 per year.

We do not believe that the “moral obligation” provides sufficient economic gain to justify its use. We do believe that there is substantial benefit from using the general credit of the county; however we recognize the practical limitations of doing so – such as equity among tax payers and the need to preserve debt capacity for other County purposes.

We would note that significant financial benefit that can be achieved by subjecting these bonds to a strong Teeter Plan commitment. (As a practical matter, the County would agree to seek an annual Teeter commitment similar to a promise to appropriate. There are debt limitation issues with an unconditional upfront Teeter commitment for the life of the bonds).

The Teeter Plan is a mechanism specific to California, whereby the County advances principal and interest payments in the event of default, and collects all penalties and interest from the homeowners when the taxes are paid. The Teeter experience has been positive for local agencies relative to property tax delinquencies; however, PACE (although not special taxes and assessments) is a new area for Teeter application.

The Impact of Costs of Issuance on Homeowner Costs and Perceptions

In our analysis, we have assumed an average loan size of $25,000 per par participant and 600 participants per transaction. Fully burdened allocation of capitalized interest, debt service reserve funds, and cost of issuance range from totals of $5,379 in the stand alone taxable assessment bond alternative to $4,013 in the QECB alternative (the Federal loan guarantee option actually has the lowest cost of all alternatives for reasons discussed above but has limited program applicability).

Without question, these costs will be perceived as high from the perspective of the homeowner. However, these costs also have their benefits. The benefit received by the homeowner regarding capitalized interest is that the first debt service payment or installment is completely funded. Similarly, the debt service reserve fund is anticipated to fund the final payment or installment. (This assumes no draws on the reserve during the life of the program). The homeowner also benefits from interest earnings on the capitalized interest fund and reserve fund prior to use (although we expect negative arbitrage in today's market environment). Therefore, the net cost to the homeowner for capitalized interest and the reserve fund is actually just the cost of issuance involved in raising these funds and the negative arbitrage awaiting draw down.

In our base case analysis, we have assumed that 3.5% of the par amount would be used to pay financing costs and reimburse the county for some of its administrative costs.

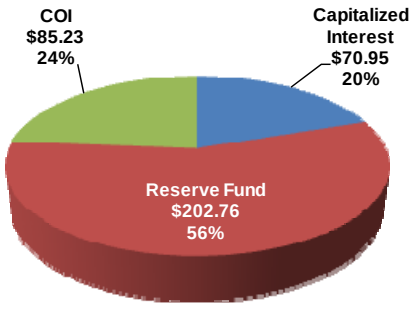
When broken down on a per loan basis, (using the option A1), the total costs per homeowner for financing $25,000 include:

Capitalized interest	$1,277
Reserve Fund	3,038
Cost of Issuance	1,063

This helps explain why cash funding (i.e., subsidizing) the reserve fund is a helpful technique to reduce homeowner costs. A cash-funded reserve would reduce the amount of funds borrowed by $3,038 in our base case example.

Annually, these administrative costs amount to $359 of the $2,997 paid by the homeowner for the $25,000 assessment, through the 15-year term:

Capitalized Interest	$ 70.95
Reserve Fund	202.76
Cost of issuance	85.23



Accordingly, a cash-funded reserve would reduce the annual assessment by $202.76.

County Cost Recovery

In our base case scenarios, we have assumed that the County charged the homeowner's between 1.75%-3.50% in costs of issuance to pay for the underwriting, legal, advisory, rating and program management services. This produced cost of issuance funding ranging from $313,688-to-$638,050. Since the County is not currently issuing a specific bond, we cannot project with certainty what the actual financing costs will be until that bond is issued. With the exception of the QECB alternative, where costs of issuance are limited by Federal law to 2% and additional costs must be included in the "taxable tail" portion of the bonds, the County has the program flexibility to add its program management costs to the costs of issuance to achieve cost recovery and facilitate program sustainability.

Each 1% of the project cost added to the par value of the transaction would produce approximately $150,000 in proceeds. As noted in our analysis, a 3.5% cost of issuance increases the All-in TIC to the borrower by approximately 55 basis points. A 1% of par increase in cost of issuance would increase the borrowing costs to the program participant by approximately 16 basis points annually.

These guidelines can be used to allow the County to recover costs based on the actual costs to administer the program, and the expected volume of loans during the course of the year. We believe it is more appropriate to charge for County services up front rather than trying to burden the ongoing interest rate and recover costs over the life of the bonds. Bond counsel should always be consulted to ensure appropriate Federal regulations are followed.

In addition to personnel and operational costs, assessment bond financings involve ongoing costs to prepare the annual tax roll and process delinquencies. One special tax consultant estimates the cost of doing this on an annual basis to be a flat fee of $4,500 plus $4.00 per parcel. In our examples using 600 parcels, this cost would equate to a per parcel cost of $11.50 annually which could be added to the assessment. Since most of the County costs are incurred on the front end in terms of processing loans, forming the financing district and managing the debt sale, we recommend that costs be recovered from bond proceeds at closing. Currently, the County manages this process "in-house."

Another cost to note is the cost of borrowing or advancing funds to finance contractual assessments. In other words, prior to achieving the 400-600 participants necessary for issuing rated debt, an interim source of financing is required for funding contractual assessments. Given that the County advances funds from the general fund or arranges a temporary line of credit from a financial institution, interest costs will be incurred. The interest costs associated with the interim financing source can be recovered and repaid from the proceeds of the borrowing at closing. We estimate that Santa Barbara County's program, once fully operational, could achieve the programmatic scale needed to issue rated debt every three months. Therefore, an advance of $15 million for three months at 3.0% interest would add approximately $112,500 in costs.

Incentives and Subsidies from the Perspective of the Homeowner

Some observers of PACE programs would note that, due to the use of the municipal bond market and the associated costs inherent to organizing and offering a property-assisted financing mechanism through the tax roll, other financing options may be cheaper and more

efficient. For example, a homeowner could choose to use a home equity line of credit (HELOC), to finance these improvements.

While this may be true for some highly credit worthy borrowers, there are still compelling economic benefits that are likely to drive property owners towards PACE programs, the cost of issuance and participation notwithstanding. These include the following:

1. **Credit access**.
   Many homeowners, including creditworthy and equity rich homeowners, are unable to obtain credit due to the general market conditions. Indeed, many governments experienced this same problem in the post 2008 environment.

2. **Term**.
   Most HELOC loans amortize much faster than the fifteen to twenty years of most PACE programs, and thus result in higher annual debt service costs.

3. **Rate**.
   Highly credit worthy homeowners can obtain a HELOC loan in the 6.5% range; however these rates are subject to monthly adjustment and most have double digit maximum rates. A PACE financing removes this risk.

4. **The ability to move**.
   One of the strongest advantages of PACE is that the assessment stays with the property and does not accelerate at the time the property changes hands. This encourages homeowners to make energy efficiency improvements, without the concern of living in the property long enough to fully amortize the value of the improvement.

5. **No refinancing risk**.
   In most cases, HELOC loans must be accelerated at the time a first mortgage is refinanced. Given the rate of refinancing, this can be problematic.

In today's environment, California homeowners can also take advantage of substantial incentives and tax credits, ***although these are equally available in the HELOC and PACE contexts***. The California Solar Initiative allows specified solar improvements to qualify for a direct payment from one of the three major investor owned utilities in the state (PG&E, So Cal Edison and Sempra). For the $25,000 solar improvement example used in our financing alternatives, this would amount to approximately $6,000 (Note the incentives decline over time and have specific requirements). In addition, the same solar improvement would qualify for approximately $7,500 in Federal tax credits (credits are received in the following year and are subject to Congressional reauthorization). We would note there are additional tax credit and utility incentives for HVAC, water conservation and energy efficiency designed around specific applications, although none is as significant as those for residential Solar PV improvements.

Finally, both energy efficiency (which includes water efficiency) and renewable energy improvements are likely to increase the value of the improved property, and reduce ongoing energy costs. Using average power rates, a typical solar PV system would result in approximately $1,400 in annual savings.

In conclusion, while the cost of the PACE program may appear expensive at the outset, compelling economic benefits are likely to drive property owner interest and participation.

Prepayments
California law gives all property owners the right to prepay their assessments at any time; however in the taxable bond markets, prepayments are not as common as in the tax-exempt municipal market (and often involve a "make-whole" premium). We would recommend a 3% prepayment penalty for those property owners who wish to prepay but we would note that this could affect the pricing of the debt.

Commercial Properties
Including Commercial properties in a PACE program creates specific challenges. As previously noted, one of the attributes required to achieve an investment grade rating is diversity of property ownership. Commercial properties tend to be larger and in some areas many not only represent a concentration of size but also of ownership. In addition, the loan terms for commercial buildings tend to be shorter than for residential mortgages, thus increasing foreclosure risk. Finally, the nature of commercial real estate is that it has a much greater amount of non-owner occupied buildings.

Commercial properties would be a top candidate for non-debt (grant) funded programs. If necessary they should either be segregated in a separate series of debt or carefully integrated into a residential pool to avoid concentration issues.

The Future of PACE Programs

With 16 states currently authorizing PACE and more under consideration, and with all California local governments under state mandate to meet AB 32 green house gas reduction targets, coupled with an increasing public awareness and concern over energy efficiency we believe the future of PACE is strong indeed. Nonetheless, specific risks to the national PACE movement remain.

On March 25, 2010 the Wall Street Journal reported that Fannie Mae and Freddie Mac were "expressing concern" over the proliferation of PACE programs, given the potential to undermine the underlying mortgages. Fannie and Freddie are specifically concerned about the fact that PACE assessments are senior to mortgages insured by these two quasi-Federal agencies. In their view, this could lead to further mortgage losses for the two agencies. This is a classic case of one Federal agency encouraging a practice (i.e., the White House and the US Department of Energy, as discussed earlier), while another objects. Many believe that if Fannie Mae/Freddie Mac buy-in cannot be secured – giving PACE a safe harbor in which to operate without lender opposition – then PACE may not grow beyond its current infancy.

We would also note that much of the compelling economics from the perspective of homeowners comes from the incentives such as Federal tax credits and the California Solar Initiative. Should these programs expire, we would expect to see a substantial reduction in demand. In the meantime however, these incentives provide compelling reasons for homeowners to consider PACE.

Demand for PACE is also a function of trends regarding energy prices. With the cost of energy expected to rise generally nationally, and specifically in California, we believe this provides a boost to PACE utilization.

On a final note, a further meltdown in the residential or commercial property markets could diminish value to the extent that credit access could be denied to all property related financing vehicles.

Recommendations for Santa Barbara County

Based on our research for this report, we would offer the following recommendations to Santa Barbara County in the structuring its PACE program:

1. QECBs are the lowest cost alternative and we would recommend using your full capacity and seeking additional QECB allocation for use by the County's program. Using QECBs would require that capitalized interest and the reserve fund, if required, be funded from external sources or "taxable tail" bond issue and this may be problematic. The potential impact of Davis-Bacon requirements on the cost of installation should also be evaluated. We would also note the limited QECB authorization currently granted to the County; therefore, a need is likely to exist to utilize a financial strategy in addition to QECBs to ensure long term program sustainability.

2. Making the debt eligible for the Teeter Plan will enhance the credit quality significantly and reduce borrowing costs.

3. Cash funding the reserve fund is an effective strategy to reducing costs to the homeowners and therefore an efficient use of any county or grant resources that may be available for the program. Approximately $1,823,010 in cash would be needed for a $15 million borrowing. Grants may trigger prevailing wage requirements where they would not otherwise apply.

4. Federal loan guarantees are effective in reducing costs and we recommend the county pursue them, however we recognize this is a speculative and inherently difficult process; therefore, we would not make your program dependent on acquiring them. A federal loan guarantee will likely trigger Davis-Bacon prevailing wage requirements where they would not otherwise apply and federal loan guarantees are currently available only for solar PV improvements.

5. We do not believe the use of the County Treasury Investment Pool provides benefits that offset the inherent risk of loss of principal. Therefore, we do not at this time recommend the use of pool resources to purchase PACE bonds, unless those bonds are structured to pay a market rate of interest and mature in five years or less.

6. Using appropriated funds, proceeds from grants, or short term lines of credit from financial institutions would be an effective way of providing sufficient short term financing until a critical mass of loans could be assembled to achieve an investment grade bond rating. Based on rating agency criteria, we believe this to be in the neighborhood of 500 individual parcels. When the long-term, take-out financings are initiated, the county can be paid back with the bond proceeds and use a portion of

the returned proceeds to fund a reserve fund. Hypothetically, $4.5 million available funds if initially loaned and then recycled would support approximately $40 million in program size. This would occur as the initial loans are refunded and the initial investment returned to the County. The funds are then used to cash fund a reserve and make a new cycle of loans to be ultimately refunded.

7. In the actual structuring of the Santa Barbara County Program, the County will need to evaluate its risk profile, policy objectives and budget constraints to implement an optimal program for County residents.

Appendix I

PACE Program

Appendix II

Recovery through Retrofit

Appendix III

Financing Alternatives