CDFA – Stern Brothers Renewable Energy Finance Webcast Series: A New Era of Energy Financing in the Midwest

The Broadcast will begin at 1:00pm (EST).

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CDFA-Stern Brothers & Co. Renewable Energy Finance Webcast Series





Katie Kramer

Director, Education & Programs
Council of Development Finance Agencies
Columbus, OH



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CDFA-Stern Brothers & Co. Renewable Energy Finance Webcast Series





Using your telephone will give you better audio quality.

Submit your questions to the panelists here.

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CDFA-Stern Brothers & Co. Renewable Energy Finance Webcast Series



Speakers

Les Krone, *Moderator* Stern Brothers & Co.

Nick Hylla

Midwest Renewable Energy Association

Sally Talberg

Michigan Saves

Jeremy Kalin

Eutectics Consulting LLC

Todd Williams

Williams Allwein & Moser LLC











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Les Krone

Managing Director Stern Brothers & Co. St. Louis, MO



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CDFA-Stern Brothers & Co. Renewable Energy Finance Webcast Series



Nick Hylla

Executive Director Midwest Renewable Energy Association Custer, WI



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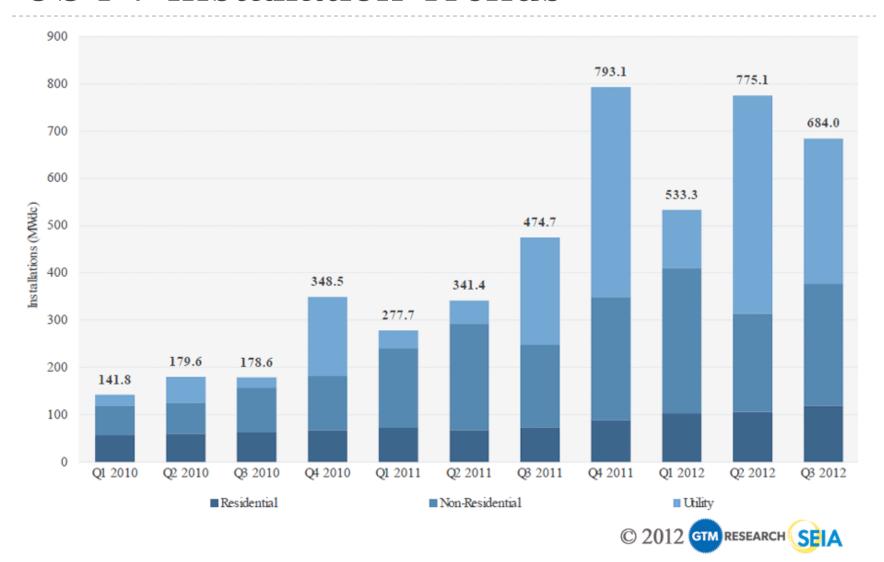


midwest renewable energy association

Solar Market Trends and Opportunities

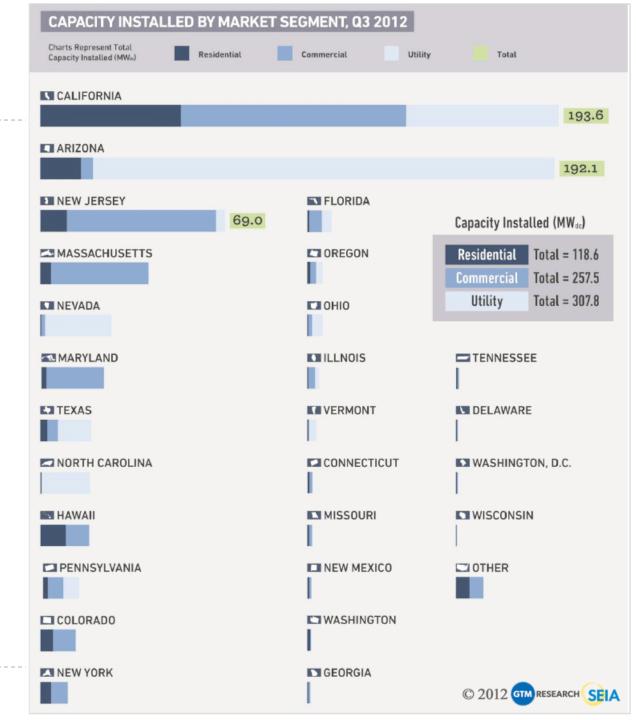
Nick Hylla, 1/24/2013

US PV Installation Trends



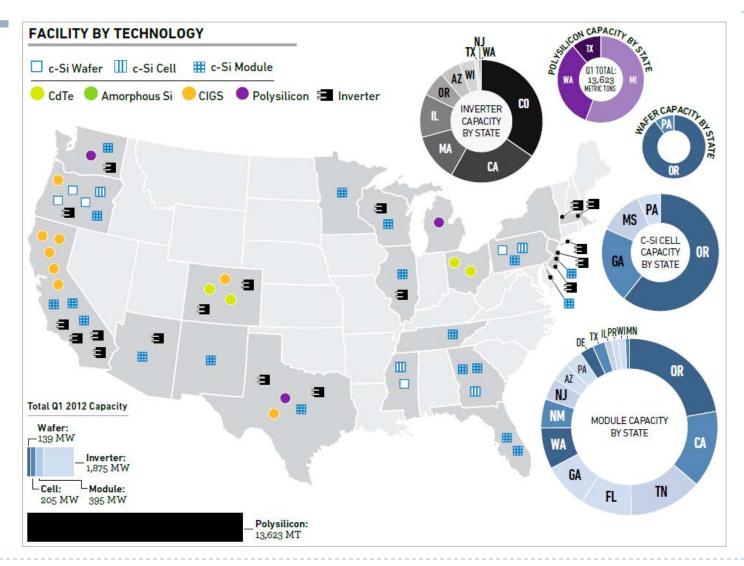
By Market Segment and by State

Sources: Solar Energy Industries
Association. 2012. US Solar Market
Insight: 3rd Qtr. 2012



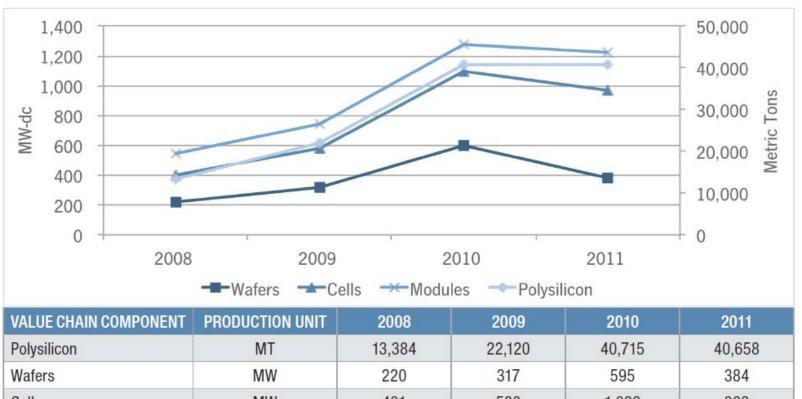
Component Manufacturing

Figure 2-4: U.S. Manufacturing Map



Module Production

Figure 2-5: U.S. PV Production, 2008-2011

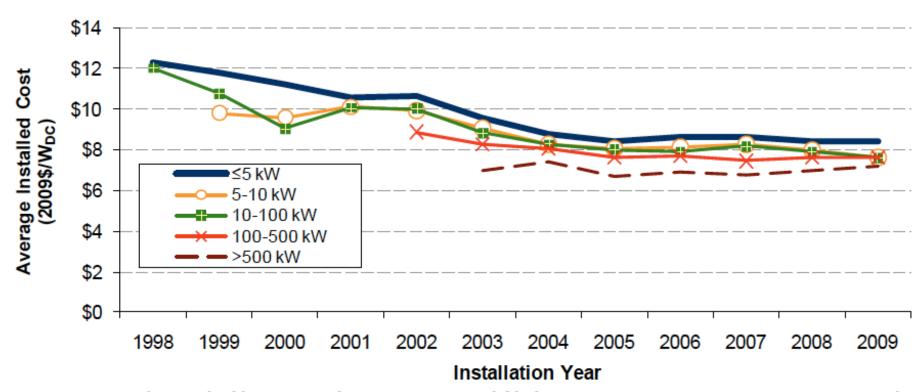


Module Prices

Figure 2-5: U.S. Polysilicon, Wafer, Cell and Module Prices, Q1 2011-Q1 2012



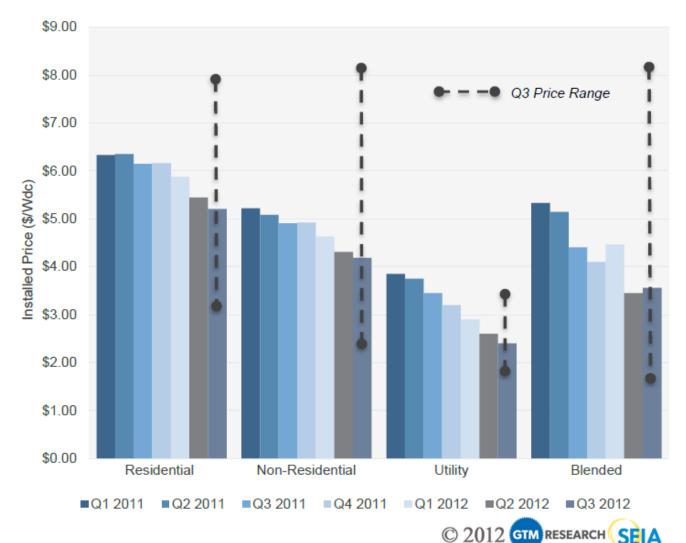
PV Price Trends by Size



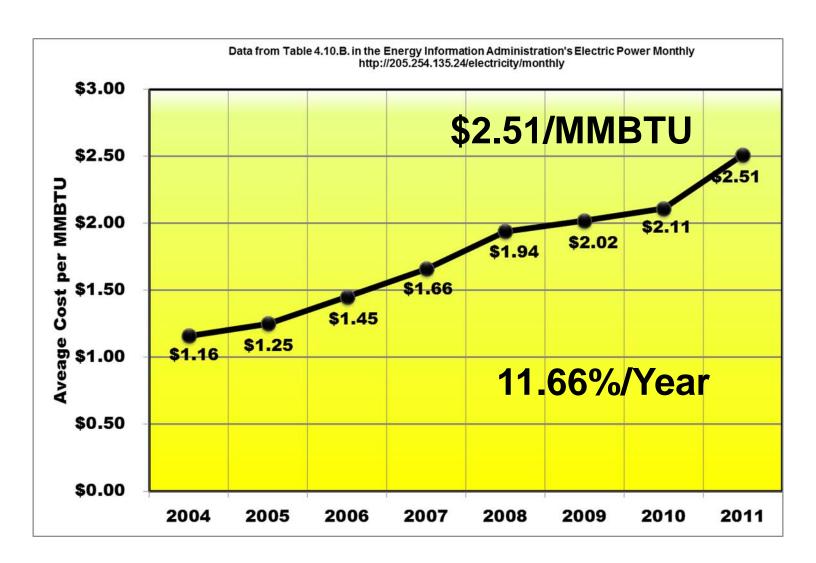
Notes: Averages shown only if five or more observations were available for a given size category in a given year. For sample sizes, refer to Table B-2 in the Appendix.

Figure 7. Installed Cost Trends over Time, by PV System Size

Q1 '11 to Q3 '12 Price Trends by Segment



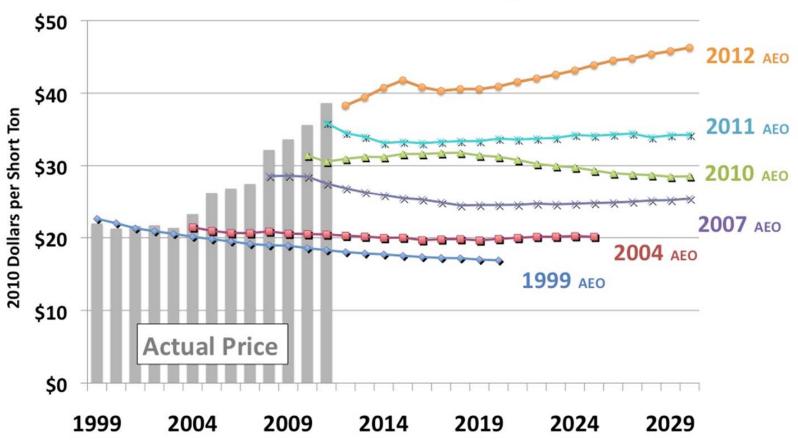
Wisconsin Delivered Coal Cost







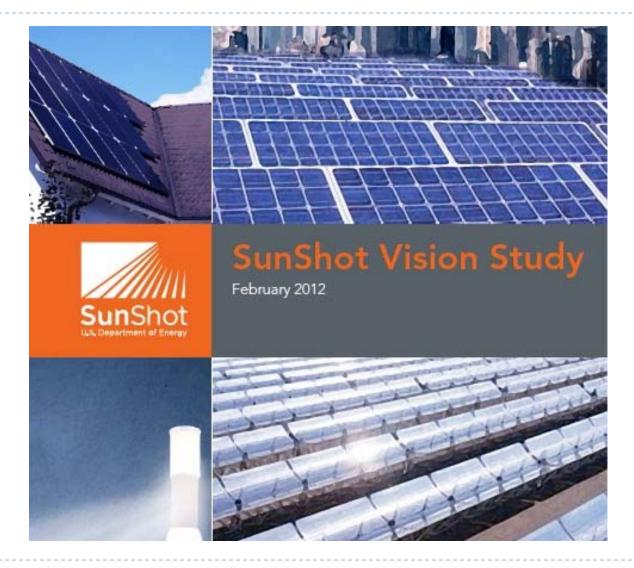
Average US Coal Prices vs Projections from Six Editions of the *Annual Energy Outlook*



Source: EIA Annual Energy Outlook 1999 - 2011. Adjusted to 2010 dollars based on US 2010 Federal Budget - Section 10, Gross Domestic Product and Implicit Outlay Deflators. Analysis by Appalachian Voices.

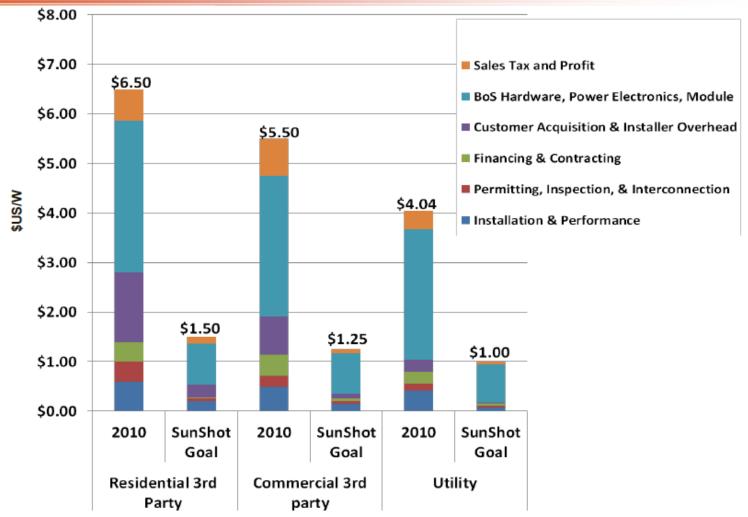


Market Penetration Initiatives



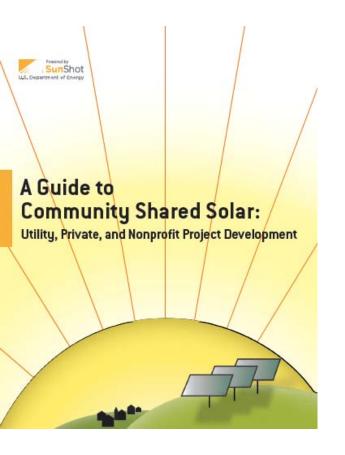
US Dept. of Energy SunShot Initiative

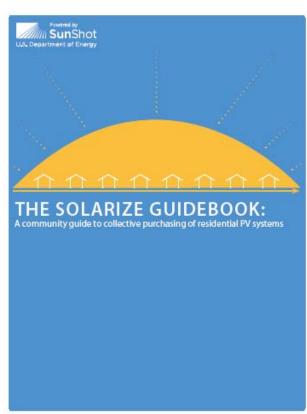
Non-hardware Balance of System (BoS) Costs, i.e., the "Soft Costs"

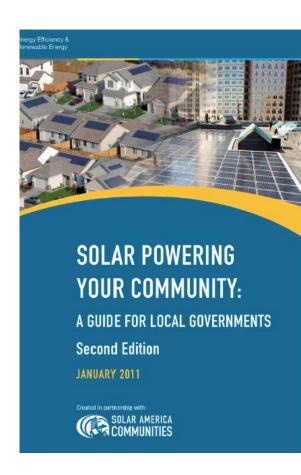




Solar Deployment Guidebooks









Opportunities for Municipalities

To Facilitate Business Investment

Commercial PACE Financing – City of Ann Arbor, Michigan

To Power Public Buildings (And Save Money)

- Hybrid PPA and Municipal Bond Financing (the 'Morris Model')
- Morris County, New Jersey

To Provide Solar Investment Opportunity to All Residents

•Municipal Community Shared Solar – Colorado Springs Utility

To Support Local Contractors

Milwaukee Power Pack and Solar Loan Program – Milwaukee,
 Wisconsin





midwest renewable energy association

Nick Hylla
Executive Director, MREA
715-592-6595, nickh@midwestrenew.org

Sally Talberg

Manager of Program Design and Implementation Michigan Saves Lansing, MI



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Michigan Saves:

Financing Energy Improvements for Homeowners, Businesses, and Local Governments

January 24, 2013

Sally Talberg, Manager Program Design



What Is Michigan Saves?



Structure



Key Michigan Saves roles:

- Provide loss reserve for participating lenders
- Oversee authorized contractors
- Drive demand for energy efficiency (outreach and incentives)
- Set program guidelines and provide quality control



Current programs



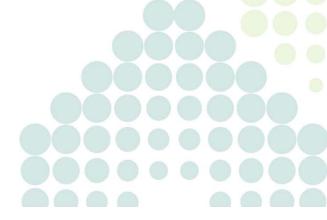


Easy. Affordable. Smart.









Michigan Saves

Home Energy Loan Program

- Affordable, hassle-free loans
 - Easier than home equity unsecured loan
 - \$1,000 to \$20,000
 - Affordable rates and terms for low monthly payment
 - Easy, quick approval over the phone or online
- Energy efficiency, solar, and geothermal
- Find Michigan Saves authorized contractors www.MichiganSaves.org



Participating Lenders

- Eight lenders provide statewide coverage
- Michigan Saves provides 5% loss reserve













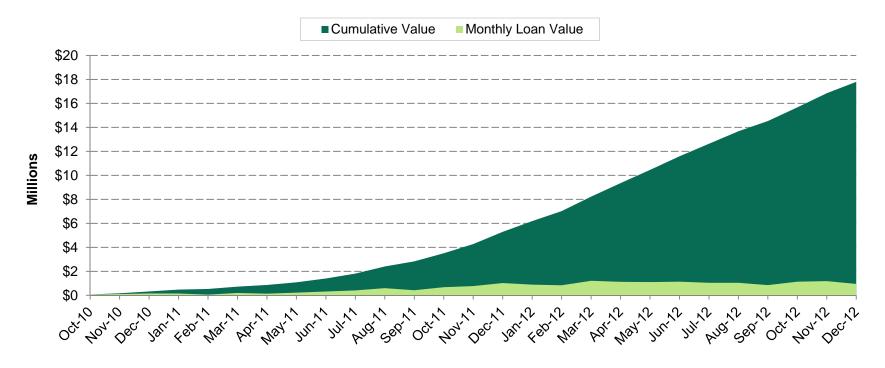






Residential Loans Issued

Loan value:	\$17.8 million (of \$68 million committed)
Loan loss reserve committed:	\$705,722 (of \$3.4 million committed)
Loan defaults:	3 loans (out of 2,177 issued or 0.1%)





Business Energy Financing

- Statewide commercial financing (\$2,000–\$150,000) for energy efficiency improvements through local lender, Ervin Leasing
- Available to all types of businesses with focus on food industry
- Fast, easy process
- Below-market rates with flexible terms up to 5 years





Typical Improvements

- Lighting
- HVAC
- Refrigeration
- Kitchen / cooking equipment
- Controls and preventive maintenance

SPECIAL OFFER!

\$2,000 rebate for 20% energy savings for businesses in food industry









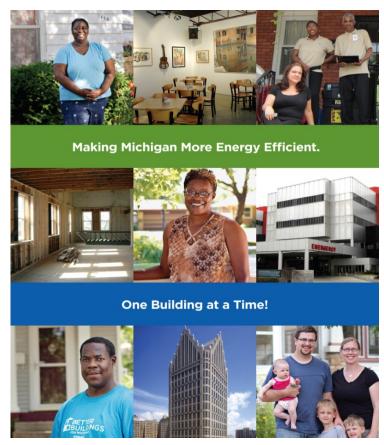


From left to right: Terri Schroeder, Sally Talberg, Gov. Rick Snyder, Julie Metty Bennett, and Todd O'Grady.

BetterBuildings for Michigan

\$30M grant from US DOE to support statewide residential and commercial energy efficiency improvements

- ~9,180 homes
- ~13.5M square feet –
 commercial
- Create a sustainable energy efficiency market







Residential Sweeps

as of January 2013

17 Completed

31 Running

6,800 Homes Served

BBFM Sweeps

Ontonagon

SE Michigan Suburbs (8 total; Ferndale, Lathrup Village, Wyandotte x 2, and 4 TBD in Macomb, Washtenaw, Oakland, or Wayne Counties)



Otsego

Alpena

Antrim

Kalkaska

Mackinac

Leelanau

Benzie

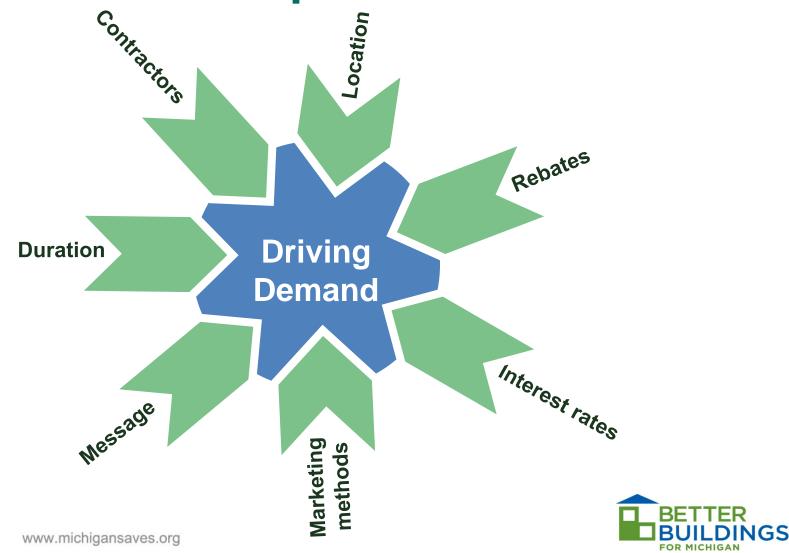
Grand Traverse

Wexford

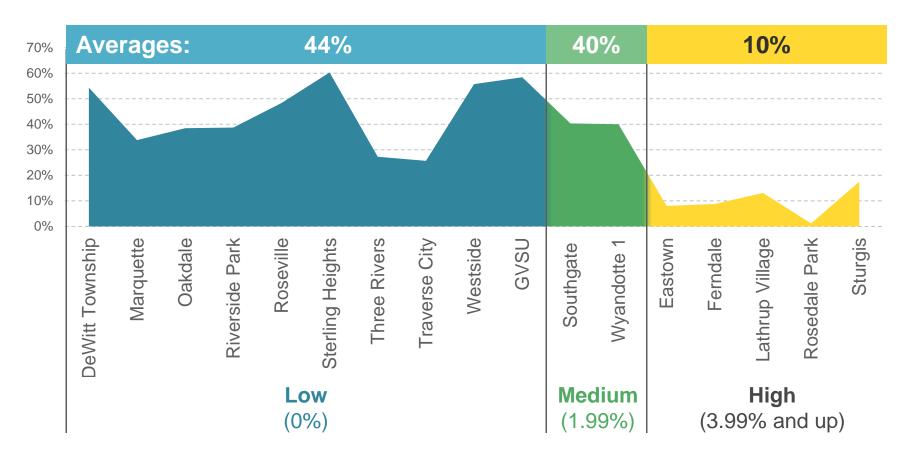




Residential Sweeps – Test and Learn



Preliminary Finding: Interest Rates Matter







Resources and Contacts

Sally Talberg, stalberg@michigansaves.org

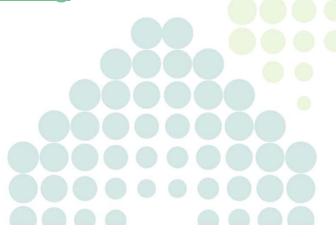
Phone (general): (734) 494-2190

Websites: www.michigansaves.org

www.betterbuildingsformichigan.org

Email: info@michigansaves.org

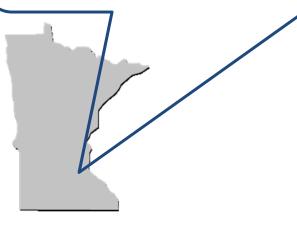




A New Era of Energy Financing in the Midwest

Jeremy Kalin

President
Eutectics Consulting LLC
Minneapolis, MN



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Clean Energy Financing | PACE Program Development Energy Security

EutecticsLLC.com

Eutectics Consulting

We connect business owners, contractors, and investors to move clean energy projects from concept to reality.



Eutectics Consulting

- Mission-oriented, for-profit
- President, Jeremy Kalin
- 5 total staff w/ additional allies



Eutectics' Values.

Eutectics Consulting is built on enduring values of **trust**, **honesty**, and the proposition that **private profits should also serve the public good.**



President, Jeremy Kalin – retired State Rep. (MN)



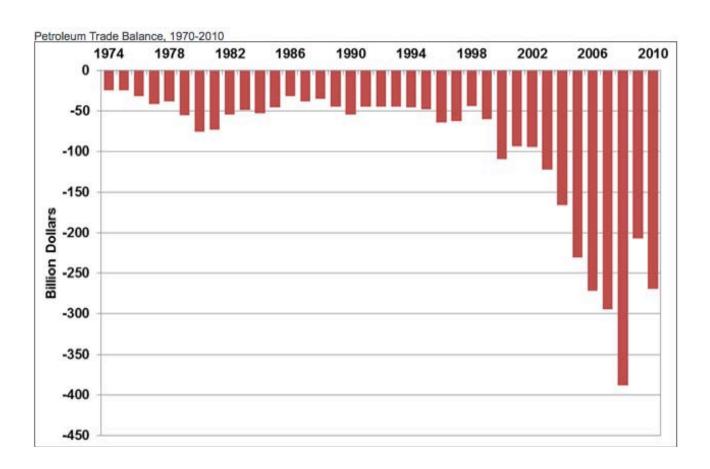


Coalition of Legislators for Energy Action Now



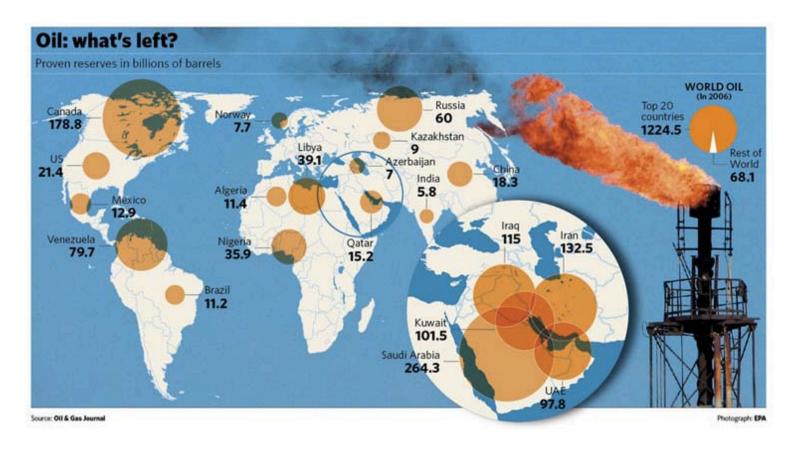


\$ 1 Billion / day...





Going overseas...





... and rarely to our friends.





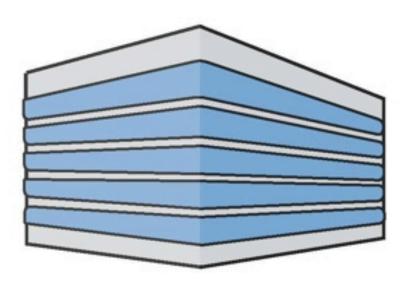
\$34 B / year of coal imports





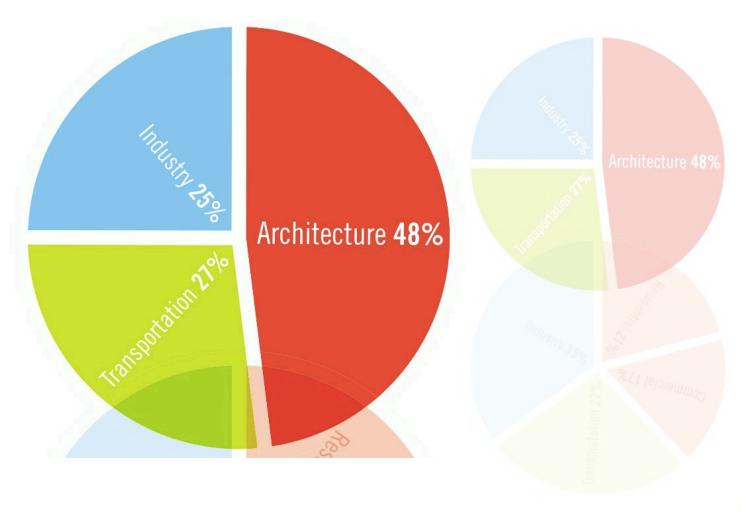


Supply Side



Demand Side

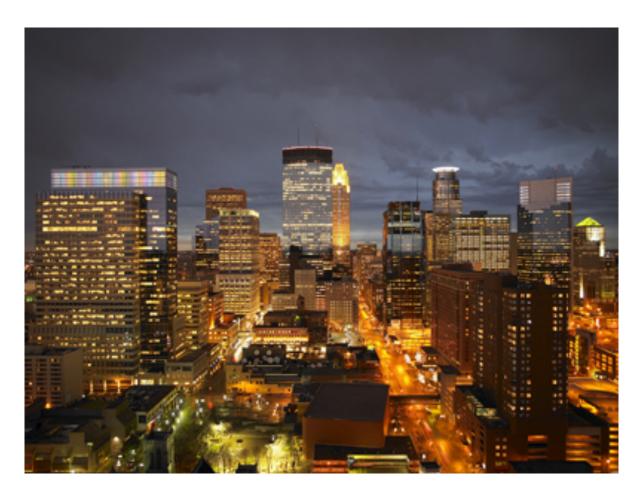
















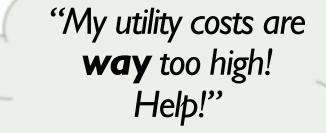


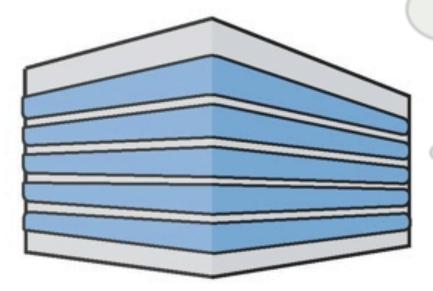
Deutsche Bank, March 2012:

In U.S. building retrofit market:

- \$1 Trillion in energy savings
- 3.3 Million jobs over 10 years
- Upfront cost of \$279 Billion
- Reduce consumption 30%
- Reduce CO2 by 10% (600MMT)

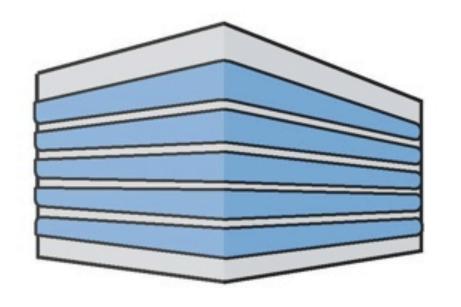






Building Owner



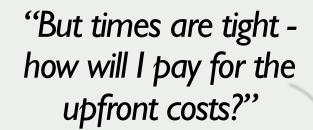


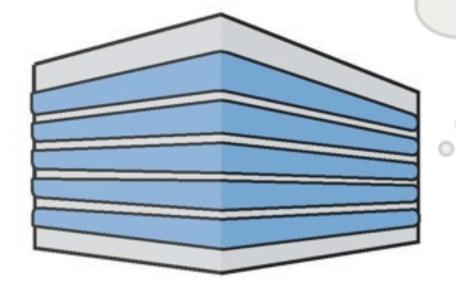
"We know how to cut energy costs!"

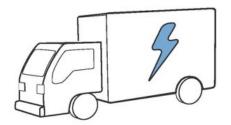


Energy Contractor

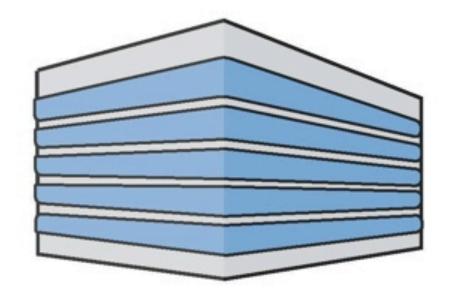




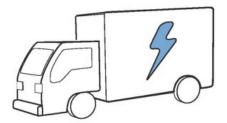








What about tax credits? Rebates? Will that help?

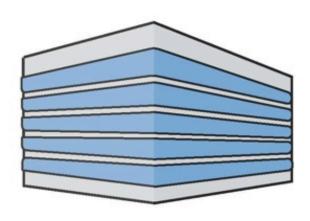


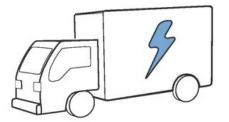




Sorry, folks, that won't cut it. I'll look elsewhere to invest.

Investors

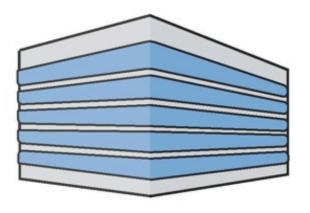




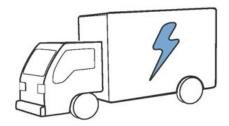




Investors



Hmmm...You could get an equipment lien...?

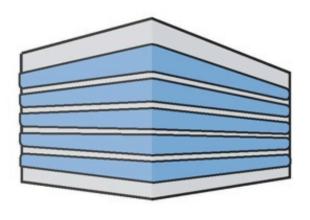






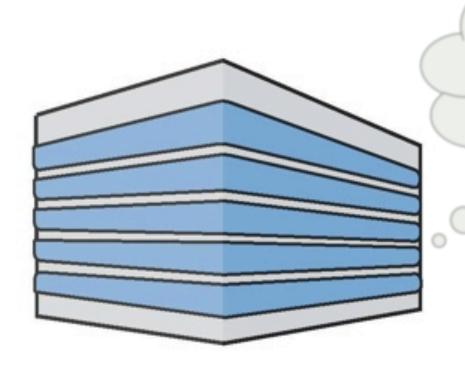
If the owner defaults and I foreclose, what do I get? Your boiler? No thanks...

Investors



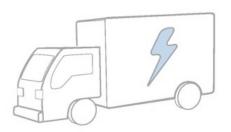




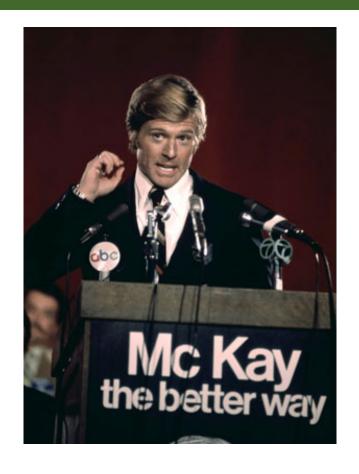


But, my utility costs are **STILL** way too high! Help!

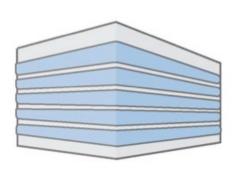




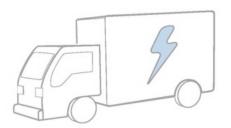




There's got to be a better way...!



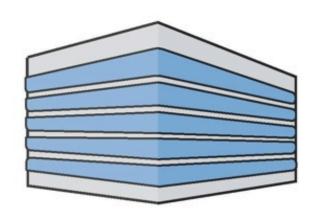








Set up the loan as secured "recourse" loans, and we'll talk...

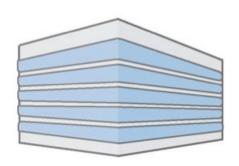




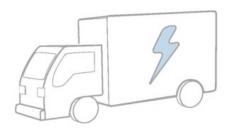




I think we can help...





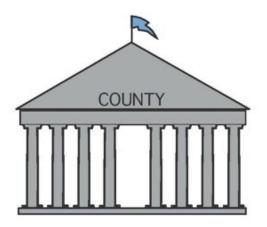




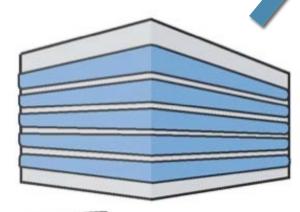
Property Assessed. Clean Energy.

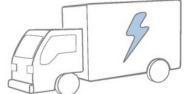
- Building-scale energy improvements
- Secured by a special assessment
- Paid back via property taxes





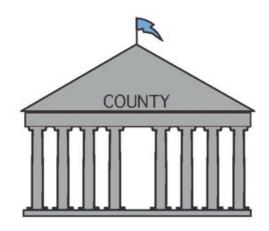
I. Apply for PACE loan.



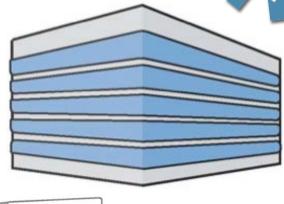








I. Apply for PACE loan.



2. City issues special assessment.

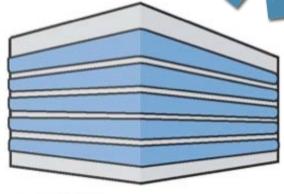




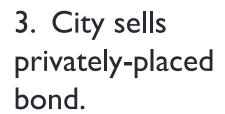




I. Apply for PACE loan.



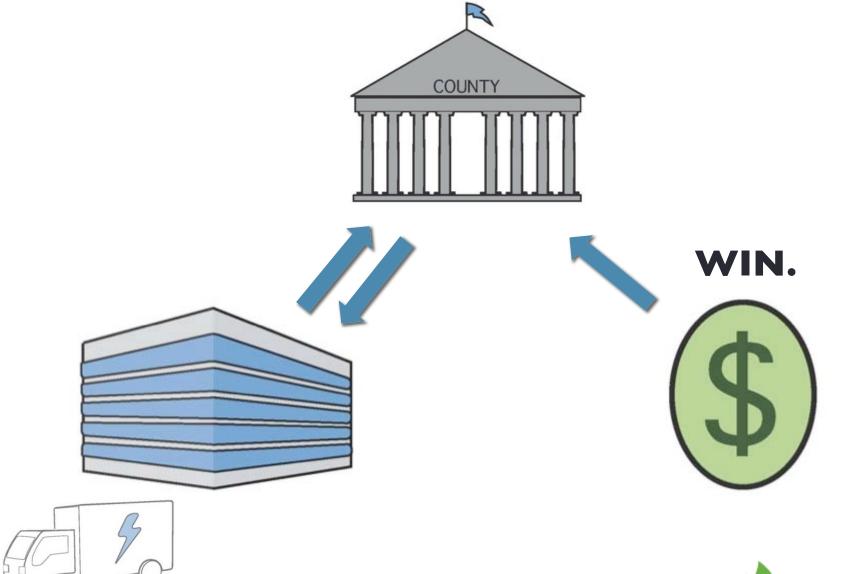
2. City issues special assessment.



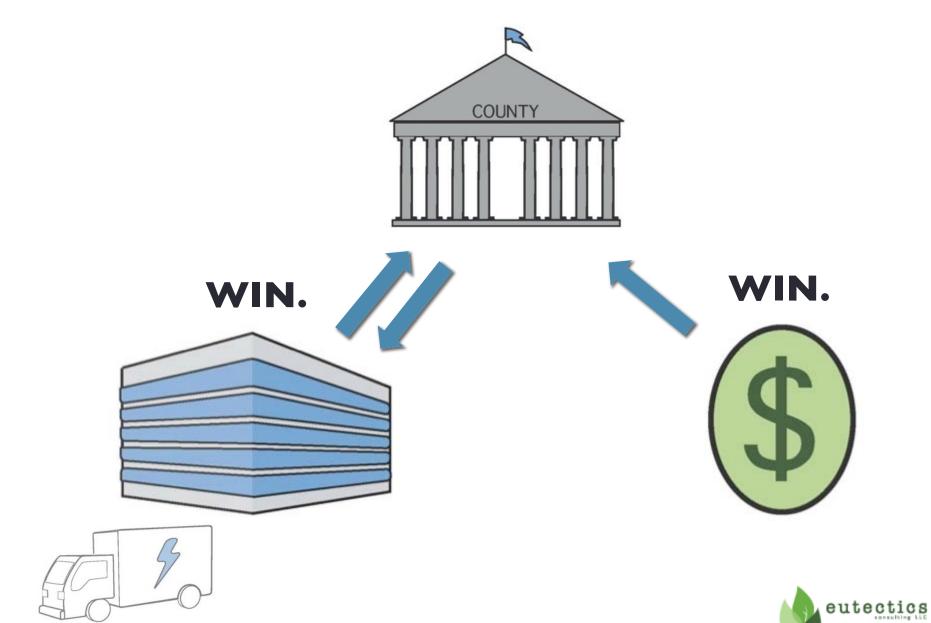


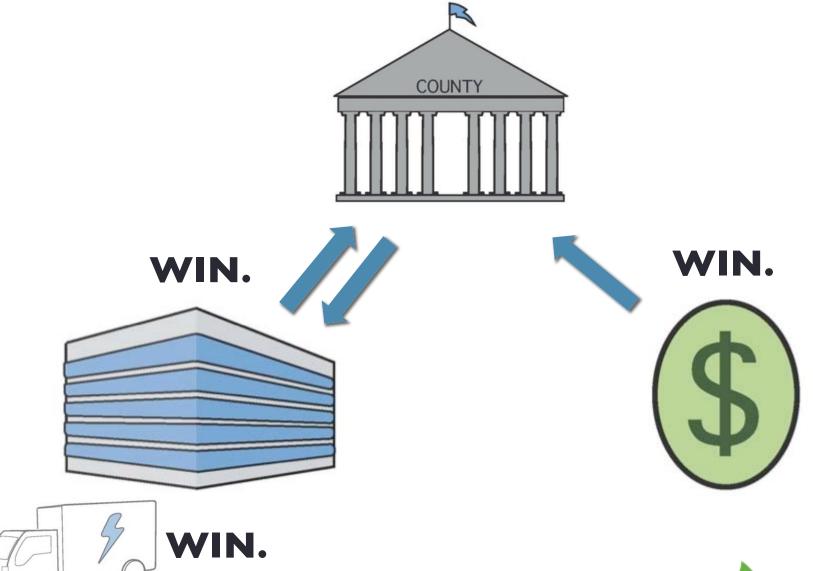




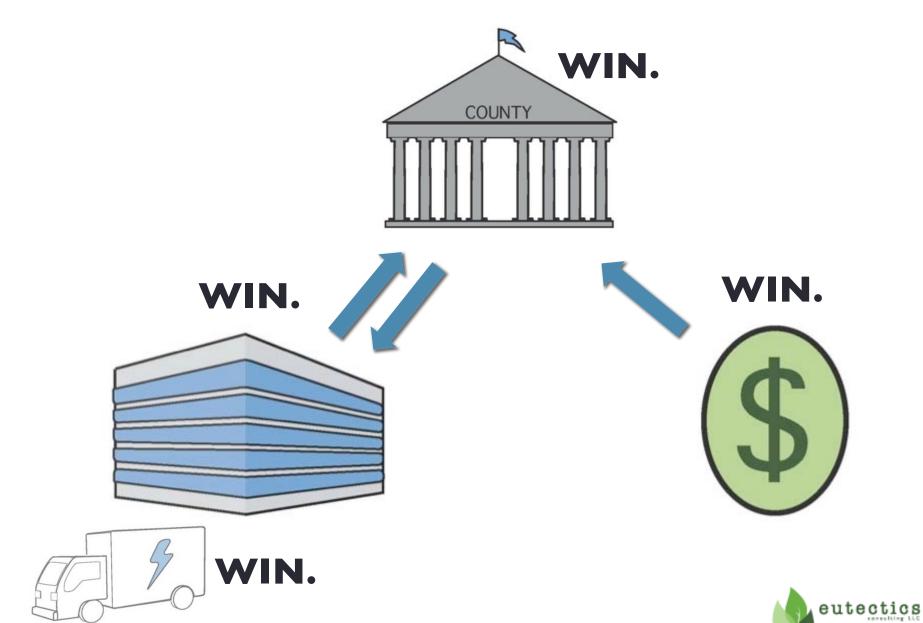






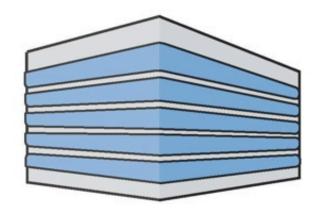






Ex. 1: Restaurant upgrade

LED lights and hood fan controls



TOTAL COST:	\$ 50,622
Xcel efficiency rebate	11,314
TOTAL PACE LOAN	\$39,308
TOTAL DOWN	\$ 0
PACE loan repayment	9,334
Energy and operations savings	15,296
first year, adjust upwards 2.25% an	nually
TOTAL SAVED / YRS 1-5	\$6,383

TOTAL SAVED / YR 6+



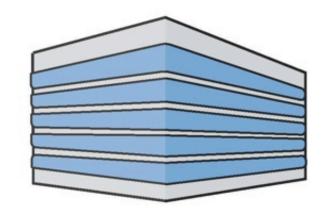


\$17,096

Ex. 2: 20kW Solar PV

tenK solar PV system

(w/o state incentives)



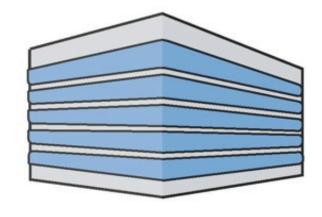
TOTAL COST:	\$ 90,000
Cost per watt \$4.50	
Federal Investor Tax Credit	27,000
Net Cost	63,000
Financing costs	2,090
TOTAL PACE LOAN	\$65,090
TOTAL DOWN	\$ 0
PACE loan repayment	9,160
Energy and tax savings	6,871
TOTAL COST / YRS 1-10	\$2,289

The Main Street Model



Ex. 3: Corp. HQ

Deep retrofit w / new HVAC, lighting, controls and more



TOTAL COST:	\$969,235
Federal Efficiency Tax Credit	151,200
Xcel/Centerpoint Rebate	80,000
Net Cost	738,035
Eutectics fee	11,070
TOTAL PACE LOAN	\$749,125
TOTAL DOWN	\$ 0
PACE loan repayment	109,032
Energy savings	128,275
first year, adjust upwards 2% and	nually
TOTAL SAVINGS / YRS I	-10 \$19,242
TOTAL SAVINGS / YR II	\$156,367



- Little-or-no-down, cash-flow-friendly
- Low-cost capital
- Easy process with local partners



Bremer Bank is the nation's first community-bank investor in a PACE project. Other investors include CDFIs, specialized energy investors, and other community banks.



The first community bank-funded PACE financing partnership in the country.

\$35 million in community-based capital ensuring local projects result in local benefits, w/ additional \$225 m leveraged.

- Uniform PACE platform for all programs
- Local capital partners
- Easy project input for contractors / owners
- Low-risk, high return for local gov's



- Looking beyond PACE, we've added:
 - Lease-purchase partners
 - SolarNote
 - CDFI-backed Green Loan Fund





Jeremy Kalin, President | Jeremy@EutecticsLLC.com

612.353.5760

A New Era of Energy Financing in the Midwest

Todd Williams

Attorney
Williams Allwein & Moser LLC
Toledo, OH



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SternBrothers&Co.

NW Ohio Advanced Energy Improvement Corporation

Implementing PACE in Ohio January 24, 2013



Todd M. Williams,
Williams Allwein & Moser, LLC

Toledo-Lucas County Port Authority NW Ohio Economic Development

Innovative Business Financing

300 economic development projects; \$1 billion investment; creating & retaining 15,000+ jobs.

- Transportation / Logistics Expertise & Mgt.
- Financing for Buildings & Equipment
 - Energy Efficiency Retrofits & Alternative Energy Financing -"BetterBuildings Northwest Ohio"
 - New Buildings & Equipment; Expansions.
 - Northwest Ohio Bond Fund
 - Small Business Loans: SBA 504 & Ohio 166
- Community Economic Development
 - Brownfield Re-Development











Regional Profile

- Northwest Ohio
- 27 counties
- Population: 2,000,000
- 11,821 square miles
- Toledo metro area
- Major manufacturing, strategic transportation,
 & agriculture centers, also solar cluster.







What is an ESID?



- Under ORC 1710 Special Improvement Districts (SID).
- ORC 727 Assessments, also applies.
- Governed by a non-profit corporation.
- Commercial property owners can make energy efficiency & alternative energy improvements & pay for them through a special assessment.
- Also know nationally as PACE Districts or "Property Assessed Clean Energy".

NW Ohio Advanced Energy Improvement Corporation



- Organized under Ohio Law: ORC 1710 & ORC 727.
- It is the Nonprofit formed to manage the Energy SID; improvement projects and financing activity including loan agreements backed by energy special assessment process.
- Currently 47 buildings in ESID, plus 9 pending.
- ESID recently expanded to include Oregon; Maumee Council reviewed 10/1; Presented to Sylvania & Township 9/26.
 Working with other communities in Ohio to form ESIDs.
- 5 Board of Directors 3 Port / 2 City; maximum 15.
- Signs loan agreements with the Port to borrow money through NW Ohio Bond Fund and lends to project borrowers.

Roles for ESID Formation



Roles for ESID Formation	
Leadership	Could come from city, township, county or non-profit corporation.
Legislator	The municipality or the township.
Assessor	The county.
Funder	BetterBuildings NW Ohio or other City, County, State non-profit, economic development groups, ESCO's, 3 rd parties, revolving loan funds, bonds or combination.
Management	Generally the non-profit corporation; could use existing economic development group.

How It Works





- Application Project & financial information.
- Energy Assessment Investment grade standard for larger projects; must establish baseline energy consumption, savings, power generation and simple payback.
- Plan & Approve Economic analysis for more complex energy projects; feasibility study. Determine scope of project & gain necessary approvals.
- Finance & Document Credit and project analysis, create finance structure, review & approval.
- Implement & Construct Complete and execute financing documents. Implement project construction.
- Measure & Verify Verify savings and energy conservation.

Energy Project Financing Features



- Can include all costs for the project: energy assessment, design, construction management, material, installation labor, financing and legal fees, borrower reserves and construction interest.
- Customer signs Loan & Security
 Agreement & Agreement to be Assessed.
- Building is placed in the energy special improvement district, Loan is backed by special assessment on the property and payments made either through loan payment or special assessment payment.





Energy Project Financing Features



- Competitive Fixed Interest Rates.
- Immediate turnkey financing from construction up to 15 year terms.
- 100% financing available, no cash out of pocket – Energy and other savings generally exceed the cost of the financing.
- Ability to include any available utility rebates and tax incentives.
- Requires a 10% refundable borrower reserve which can be funded by the loan, cash or LOC.
- \$25,000 to over \$5,000,000.





Energy Project Financing Features



- Port and Toledo Ohio Advanced Energy Improvement District borrow funds through the NW Ohio Bond Fund, an investment grade rated fund, and makes funds available to a variety of small to large businesses and entities.
- We provide the ability to aggregate small transactions and provide them with long term financing similar to a large corporation or municipality.
- We can blend with other energy financing programs including QECB's & State.





Dr. Martin Luther King, Jr., Plaza





Other Case Study Examples

- Port One Maritime Plaza
 - Energy savings 45%
- City of Toledo over 40 buildings
 - Energy savings 25%
- Commercial Office Buildings 2
 - Energy savings 35%
- Auto Dealerships 2
 - Energy savings 60%
- Parking Garages 3
 - Energy savings 43%















Marketing & Partnering















DOWNTOWN TOLEDO

IMPROVEMENT DISTRICT







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SUSTAINABILITY

COMMISSION

















- Organizational Outreach
 - Regional Chambers of Commerce
 - NWO Economic & Community Development Organizations
 - Professional Service Organizations –
 Business & Financial
 - Referrals Advisors, Contractors,
 Government, Area Leaders
- Contractors, Architects, Engineering, Energy Services Companies & Equipment Vendors are Key
- Residential Partnership



Home Performance Solutions





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Attorneys at Law









Audience Questions



CDFA-Stern Brothers & Co. Renewable Energy Finance Webcast Series



SternBrothers&Co

Upcoming Events at CDFA

Intro Bond Finance WebCourse

Daily: 12-5pm (EST) January 29-30, 2013

Reshored Manufacturing Webinar Series

4-part series February 13, 2013

Fundamentals Course

Washington, DC March 14-15, 2013

Register online at www.cdfa.net

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Program is the industry's only comprehensive development finance professional certification program. Graduates of the DFCP Program gain valuable knowledge and experience within the complex development finance industry and achieve a level of understanding unmatched by any other professional certification program. Getting started is easy:

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Upcoming Webcasts

CDFA – Stifel Nicolaus Innovative Deals Webcast Series Thursday, February 14, 2013 @ 1:00pm Eastern

CDFA – BNY Mellon Development Finance Webcast Series Tuesday, February 19, 2013 @ 1:00pm Eastern

CDFA – Stern Brothers Renewable Energy Finance Webcast Series Thursday, April 11, 2013 @ 1:00pm Eastern

CDFA-Stern Brothers & Co. Renewable Energy Finance Webcast Series





For More Information





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