

Introducing PACE in Texas



A Webinar Introducing SB 385, Texas' New Property Assessed Clean Energy Act The First in a Three-part Series

**A Primer on the benefits and opportunities created for
Counties and Municipalities**

August 6, 2013

Creating Economy

Through Long Term, Affordable Financing for Water and Energy Retrofits to Commercial and Industrial Property

PACE in a Box

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PACE in a Box

- **SB 385, Sen. John Carona and Rep. Jim Keffer**
- **The coalition:**
 - **County Judges and Commissioners Association of Texas**
 - **Independent Bankers Association of Texas**
 - **Texas Association of Business**
 - **Texas Association of Counties**
 - **Texas Bankers Association**
 - **Texas Building Owners and Managers Association**
 - **Texas Combined Heat and Power Initiative**
 - **Texas Manufactures Association**
 - **Texas Municipal League**
 - **Texas Renewable Energy Industry Association**
 - **US Business Council for Sustainable Development**
 - **US Green Building Council**
 - **Dozens of other organizations and companies**

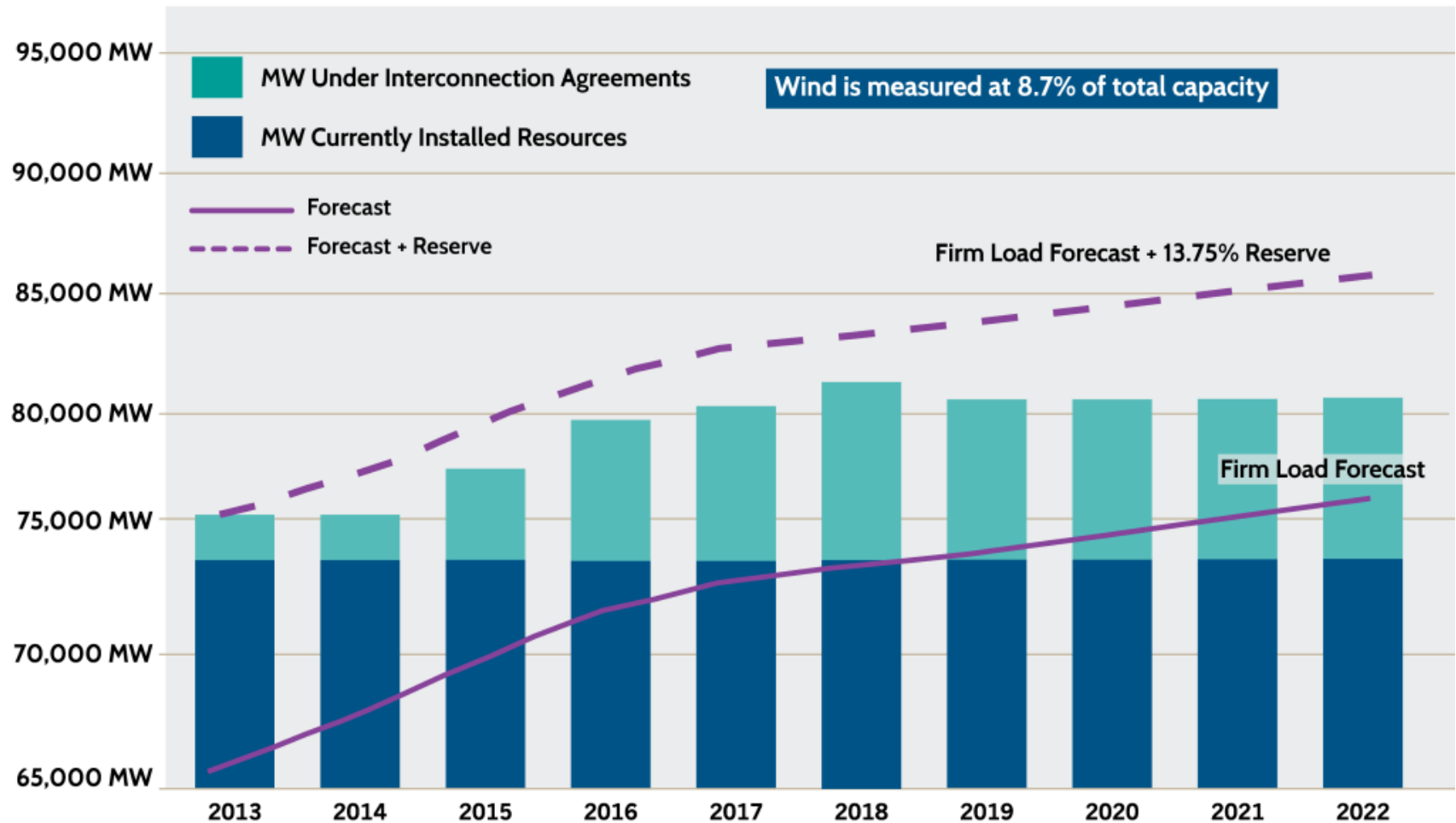
PACE in a Box

PACE Benefits Counties and Municipalities

- **Economic Development – A US investment Opportunity of nearly \$28 billion over the next 10 years that would translate to:**
 - Over \$1 trillion in energy savings,
 - over 3 million jobs, and
 - Over 600 million fewer metric tones of carbon emissions*
- **Improved Building Infrastructure**
- **Voluntary private sector water and energy conservation**
- **Voluntary private sector support for and progress toward local community goals**

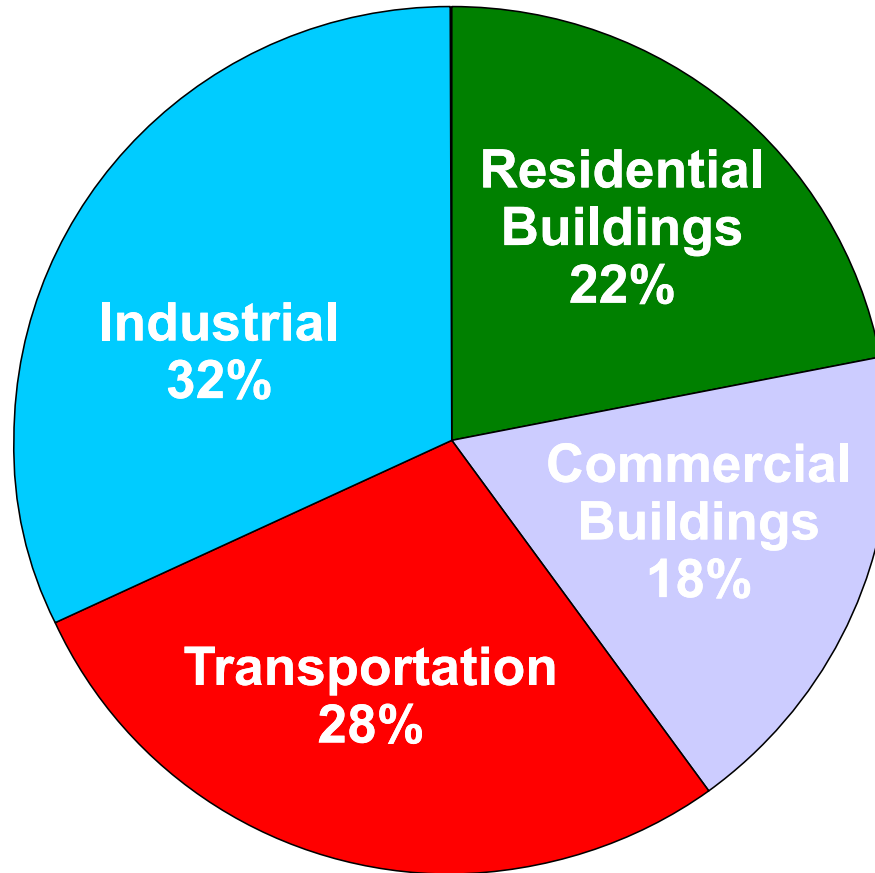
*United States Building Energy Efficiency Retrofits: Market Sizing and Financing Models
A 2012 Research Study Collaboration between the Rockefeller Foundation and

ERCOT Electricity Demand and Supply



Energy Consumption in the U.S.

Commercial and industrial sectors account for 50%

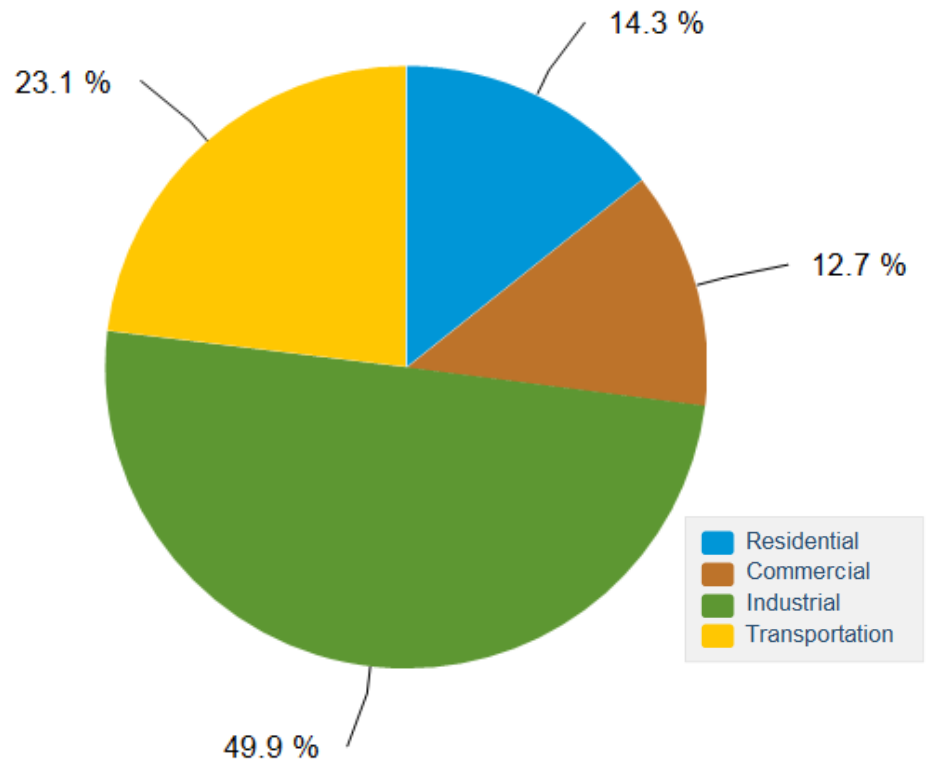
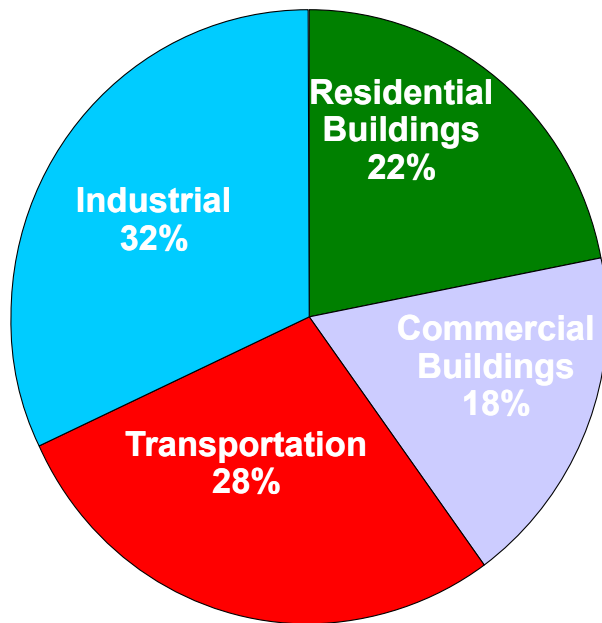


Sources: U.S. Dept. of Energy (2009) *Building Energy Data Book*; World Resources Institute (2006) *U.S. Greenhouse Gas Emissions Flowchart*; U.S. Energy Information Administration (2008) "2003 CBECS" Table B9; Marnay, C and M. Stadler et al. (2008) "A Buildings Module for the Stochastic Energy Deployment System." LBNL

Energy Consumption in Texas

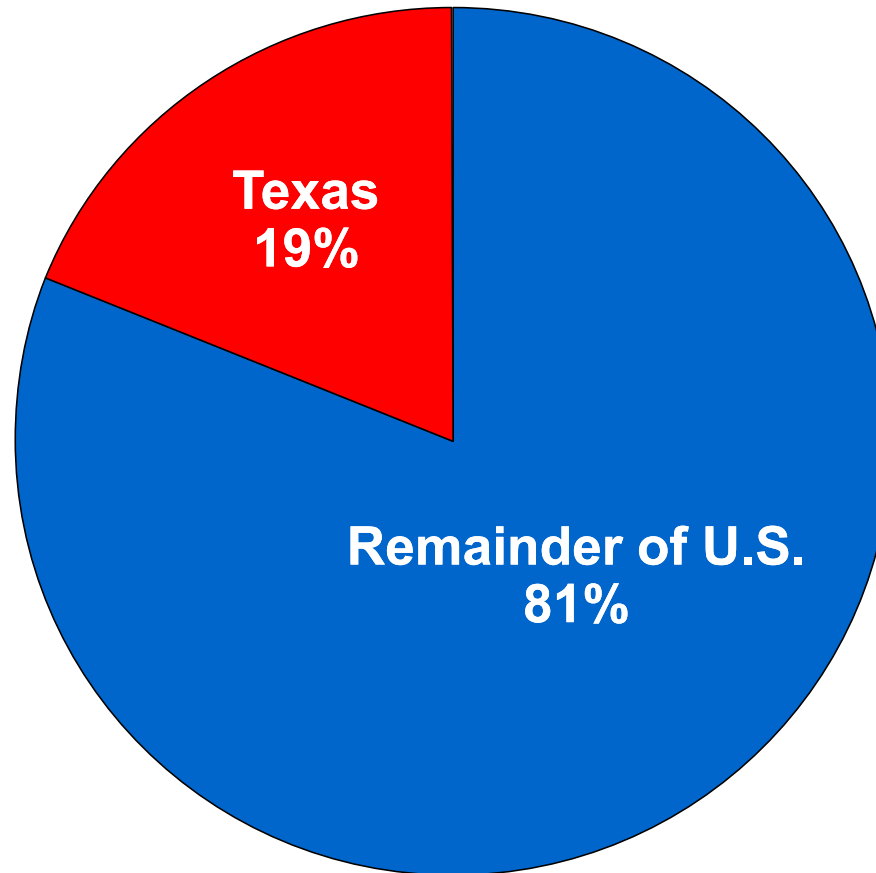
Commercial and industrial sectors account for 63%

Texas Energy Consumption by End-Use Sector, 2011



Source: Energy Information Administration, State Energy Data System

Texas vs. Nationwide Energy Consumption By Industry



**Texas' industrial sector is a huge, untapped market
for energy saving retrofits.**

Deloitte reSources 2012 Study:

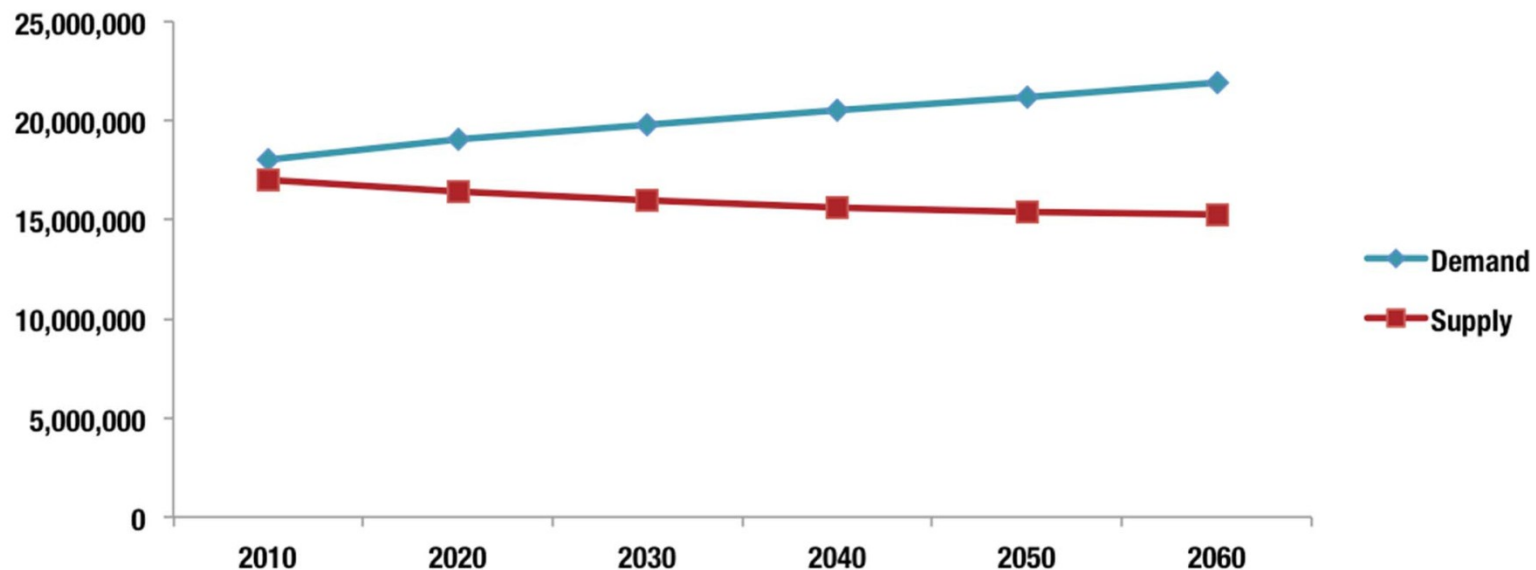
Insights into Corporate Energy Management Trends

Insights into Texas' Corporate Energy Management

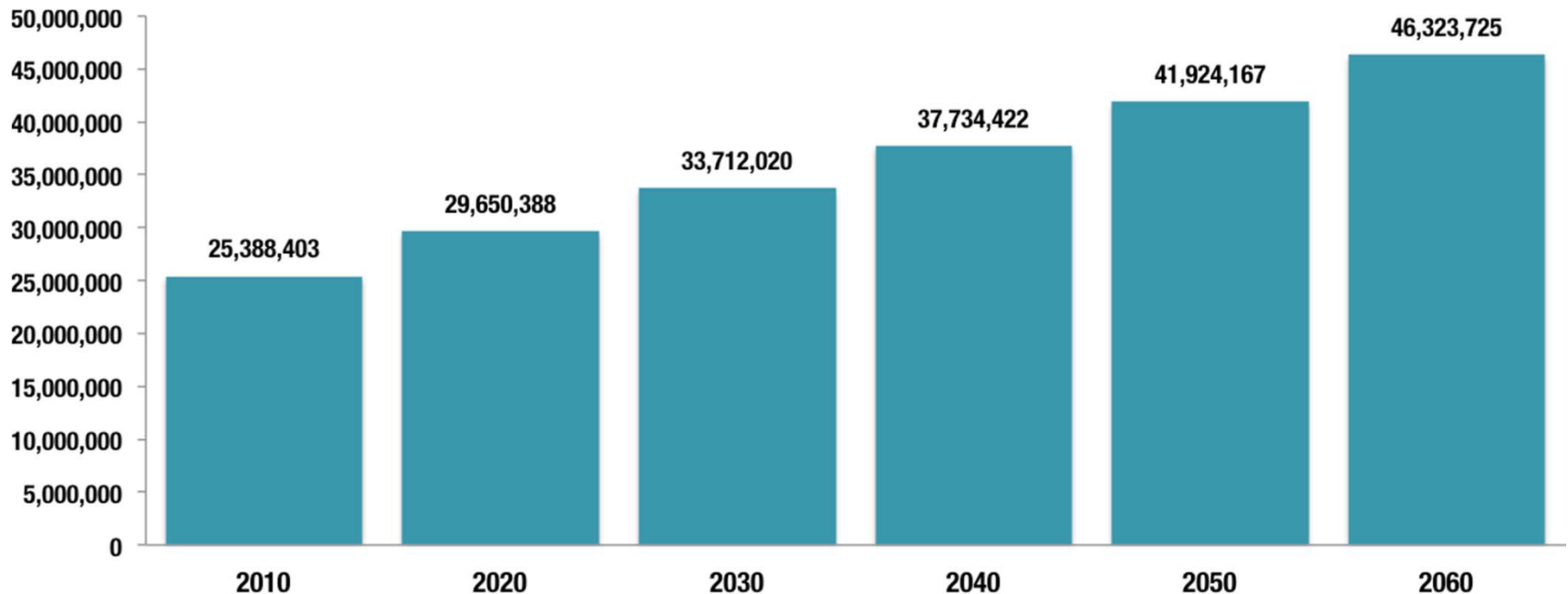
90% of Texas companies surveyed have specific electricity and energy management goals in place:

- **90% View reducing electricity costs as essential to staying competitive from a financial perspective**
- **73% view reducing electricity costs as essential to staying competitive from an image perspective**
- **57% have customers demanding more environmentally considerate solutions**

Texas' Projected Water Demands and Existing Supplies



Projected Texas Population



“More than 1,000 people...move to Texas every day.” Gov. Rick Perry, 12/29/2012.

STOP: talking about the problem.

START: talking about the solution!

- **Texas Leadership is investing in water and power infrastructure – Water, Energy, Roads**
- **Investing in Building infrastructure – part IV of the solution**
- **By far the cheapest and most affordable supply we find will be the existing supply we can reallocate because of conservation**
- **Old approaches called for mandates or tax and incentive policies that distorted the market and reduced revenues to local governments**
- **New approach...**

Why Not Capitalize the Energy Savings?

- *“U.S. Businesses Waste \$60 Billion Annually on Energy.”*
- *“Scaling up energy efficiency retrofits offers a \$279 billion investment opportunity with potential for energy savings totaling more than \$1 trillion over a period of 10 years.”*

If there is so much pent-up demand for energy & water efficiency retrofits for commercial and industrial buildings, then why is this untapped sector of the economy laying fallow?

Answer: The ROI for energy retrofits is too long to justify capital expenditures using existing financing tools.

Sources: Beth Hartman, E Source Research Brief, September 2012; Report conducted by The Brookings Institute ‘Renewing the Economy’ November 2012

Example: Typical Private Sector Retrofit Bid - 5 Star Hotel

Overview of Financial Summary

Item No.	Building	ECM Description	Annual Dollar Savings					Project Cost	Simple Payback	Detailed Audit Cost (\$)
			Electric	Gas	Water	O&M	Total			
1	██████████	Replace two 350 ton Chillers	\$5,000			\$5,000	\$10,000	\$720,000	72.0	\$10,800
2	██████████	Add Cooling Tower Isolation Valves	\$3,000				\$3,000	\$7,500	2.5	
3	██████████	BAS for Central Plant (EMCS)	\$1,000			\$4,000	\$6,000	\$65,000	10.8	
4	██████████	Convert penthouse DX systems to CHW	\$15,500			\$4,000	\$19,500	\$97,500	5.0	\$1,463
5	██████████	VFDs on 4 AHUs, Economizer	\$750			\$3,000	\$3,750	\$50,000	13.3	
6	██████████	Water Conservation Retrofits	1000	\$5,000	\$25,000	\$0	\$31,000	\$255,000	8.2	
7	██████████	Convert PIB/VAV boxes to EMCS Control	\$20,000				\$20,000	\$80,000	4.0	
8	██████████	Add DDC Controls to AHUs in Penthouse	\$3,000			\$1,500	\$4,500	\$60,000	13.3	
9	██████████	Lighting Retrofits	\$92,000			\$1,500	\$93,500	\$221,000	2.4	
10	██████████	Chiller Plant Optimization	\$85,000			\$1,500	\$86,500	\$250,000	2.9	\$12,825
11	██████████	BAS Night Setback for Meeting Rooms	\$4,000				\$4,000		0.0	
		Totals	\$230,250	\$5,000	\$25,000	\$20,500	\$280,750	\$1,806,000	6.4	\$25,088

The secret to **PACE** in a Box

- **The keys to PACE are the assessment and the senior lien.**
- **Assessments are economic development tools used successfully in Texas for decades (Property Improvement Districts, PIDs).**
- **Think of PACE as “a one building PID.”**
- **Since the cost of the PACE program overhead can be folded into the assessment, PACE programs can operate without local tax dollars.**
- **The assessments stay with the land and do not accelerate.**

So What's the **PACE** Process?

- **A building owner (office building, store, factory, barn, church, apt. complex, etc.):**
 - ▶ Finds a contractor,
 - ▶ Selects projects,
 - ▶ Identifies a lender, and
 - ▶ Applies to the PACE program
- **If the owner, building, and project all meet PACE requirements:**
 - ▶ The owners signs a contract with the PACE program, which places a senior lien on the property
 - ▶ The lender provides funding,
 - ▶ The contractor completes the project, and
 - ▶ The PACE program bills assessments to the owner and forwards the payments to the lender

The fine print

- If there is an existing mortgage, the written consent of the mortgagee is required
- PACE projects must be permanent improvements to existing facilities
- PACE projects must conserve water, increase energy efficiency, and/or add renewables or other onsite power generation like CHP.
- SB 385 requires an independent review of the projected savings to provide confidence in the project's utility savings for the building owner, lender and community
- A PACE annual assessment is less than the annual water and energy savings of the project
- The loan/assessment is spread over the number of years necessary for the annual utility savings to pay for the assessments (<20)

SB 385 - **PACE** Offers Solutions

Barriers

Scarce internal capital budget

No access to, aversion to financing

- No investment-grade credit rating
- Lack of collateral assets that don't fall under first mortgage

Uncertain holding period

Owner / tenant split incentives

Skepticism savings/ROI will be realized

PACE Solutions

No down payment and costs spread over time w/ savings

- Repayment security through senior lien position
- Backed by property, not by owner or equipment collateral

PACE obligation transfers to the new owner upon sale

Qualifies as NNN pass-thru cost

ESCO/contractor guarantees or third party insures performance

PACE in a Box

- **A PACE tool kit of recommendations and templates for counties and municipalities to:**
 - ▶ **Create viable, cost effective, user friendly, scalable, and sustainable PACE programs**
 - ▶ **Encourage and support local discussions about forming regional or multi-jurisdictional programs**
- **Assist in the implementation of PACE in a Box through education, marketing and training**
- **Provide continuing feedback and improvement**

Keeping PACE in Texas is coordinating five **PACE in a Box** coalition working groups:

- **The Program Design working group will make recommendations on:**
 - ▶ **PACE program creation and templates for municipal resolutions, county minutes and the accompanying report**
 - ▶ **The Application Process**
 - ▶ **The Application Review Process**
 - ▶ **The process for establishing and recording the lien**
 - ▶ **The collection process**
 - ▶ **The templates for related documents**
 - ▶ **The PACE in a Box tool kit - workbook**

Building **PACE** in a Box

- **The Program Underwriting Working Group is making recommendations on requirements for:**
 - ▶ **Building owner qualifications**
 - ▶ **Building qualifications**
 - ▶ **Project Qualifications**
 - ▶ **Savings to Investment Ratio >1**
 - ▶ **Lender consent**
 - ▶ **Sector Specific issues: non-profit, rural, agriculture, water**
 - ▶ **Document templates**

Building **PACE** in a Box

- **The Program Technical Standards Working Group is establishing protocols for:**
 - ▶ **Energy saving measurement and verification (M&V)**
 - ▶ **Water saving M & V**
 - ▶ **Third party review**
 - ▶ **Methods for improving deliverables (insurance, guarantees, etc.)**
 - ▶ **Transparency**

Building **PACE** in a Box

- **The Funding Platform Working Group is establishing recommendations for:**
 - ▶ **Providing building owner access to all funding sources**
 - ▶ **Responsible loan making**
 - ▶ **Working closely with Texas Banks**
 - ▶ **Attracting large, affordable sources of capital**
 - ▶ **Joint projects in multiple regions**
 - ▶ **Lender – PACE program interaction**
 - ▶ **Bonding**
 - ▶ **Risk reduction: Cash-flow/Reserves/Credit enhancements**

Building **PACE** in a Box

- **The Education, Marketing and Training Working Group is:**
 - ▶ **Reaching out to municipalities and counties with articles, this webinar, etc. to inform about PACE in a Box**
 - ▶ **Working with the coalition to design a state-wide education campaign for local communities, building owners, lenders and contractors**
 - ▶ **Working with the coalition to develop a state-wide marketing campaign for local communities, building owners, lenders and contractors**
 - ▶ **Working with the coalition to create state-wide training programs for local officials, third party reviewers, etc.**

PACE in a Box

SB 385 Creates Good things for Texas Communities:

- ▶ **All authority is local and voluntary**
- ▶ **Taxpayer dollars are not necessary**
- ▶ **No mandates, no picking winners and losers**
- ▶ **Free market at work (building manager CAN invest in retrofits with the CFO's blessing & lender consent)**
- ▶ **Keep the Texas economic engine primed by creating economy & jobs; money now burned in utility bills is capitalized and contributes to the local economy!**

Anticipating **PACE** in a Box

- **Interested in PACE? Here's what you can do now:**
 - ▶ Join the Texas PACE Coalition and help create PACE in a Box. Sign up on the “Contact Us” page at www.KeepingPACEinTexas.org
 - ▶ Begin conversations about why PACE and its economic development outcomes are good for your community and your businesses
 - ▶ Begin conversations with your neighbors about the best way to consider a regional or multi-county program
 - ▶ Resources:
 - www.KeepingPACEinTexas.org
 - www.PACENow.org



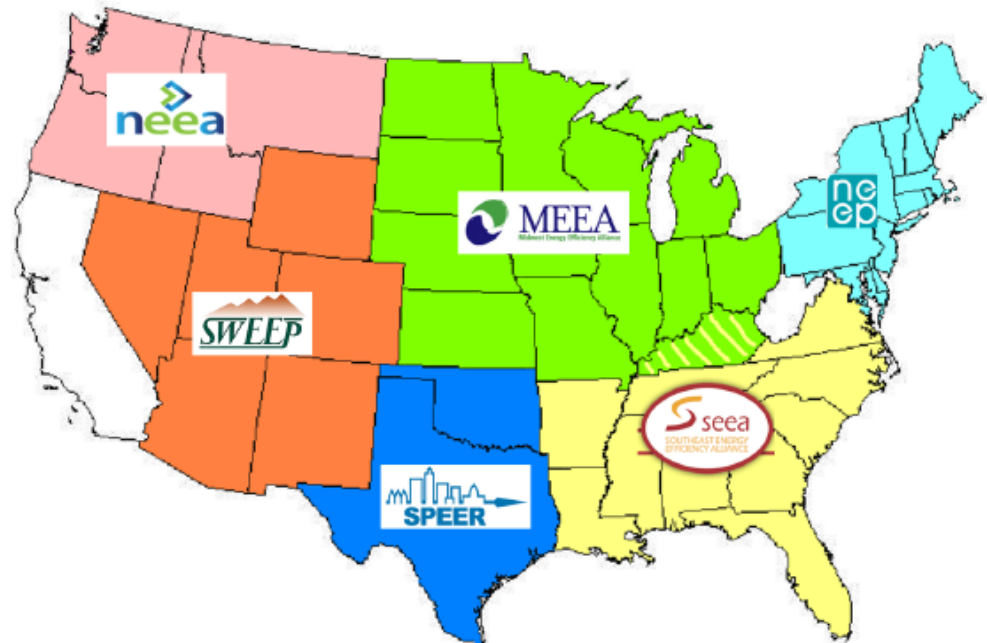
Introducing PACE in Texas

Doug Lewin

Executive Director, SPEER

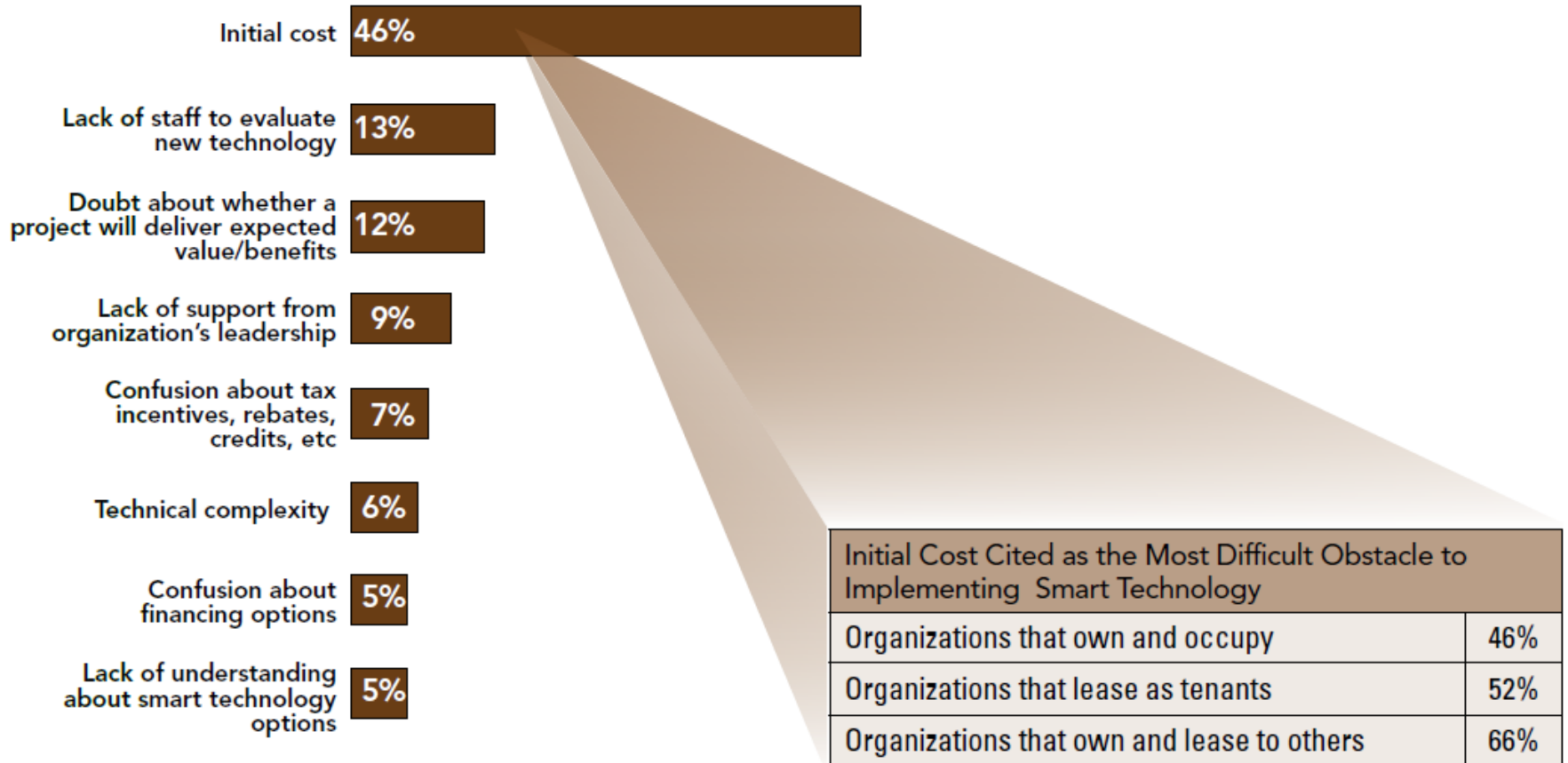
What is SPEER?

- **Member-based, non-profit organization**
- **The Newest Regional Energy Efficiency Organization (REEO)**
- **Established 2011**
- **32 members**



Why PACE is important

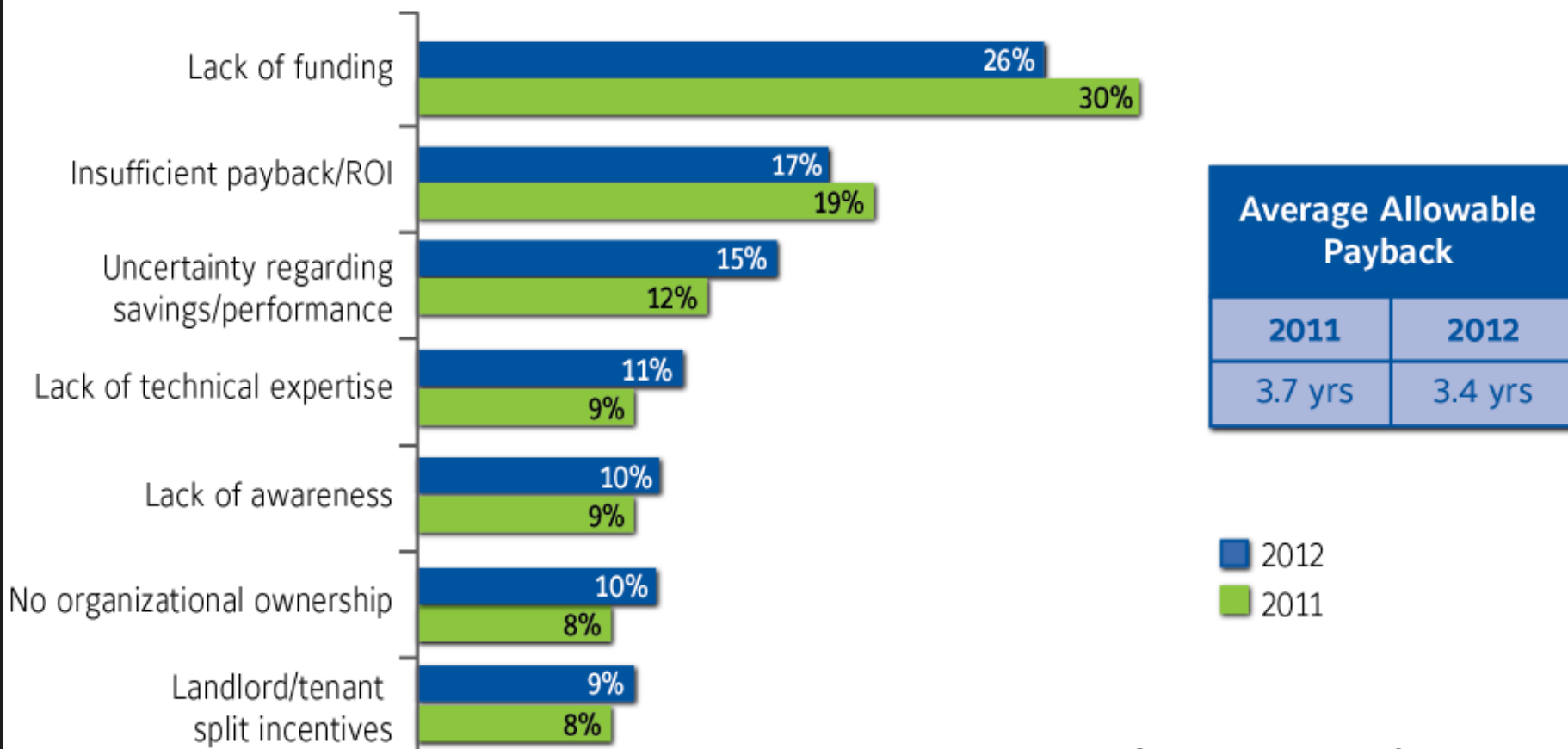
What are the most difficult obstacles to your organization's implementation of smart energy infrastructure?



Source: Stamats Building Media,
November 2011

PACE tackles key barriers

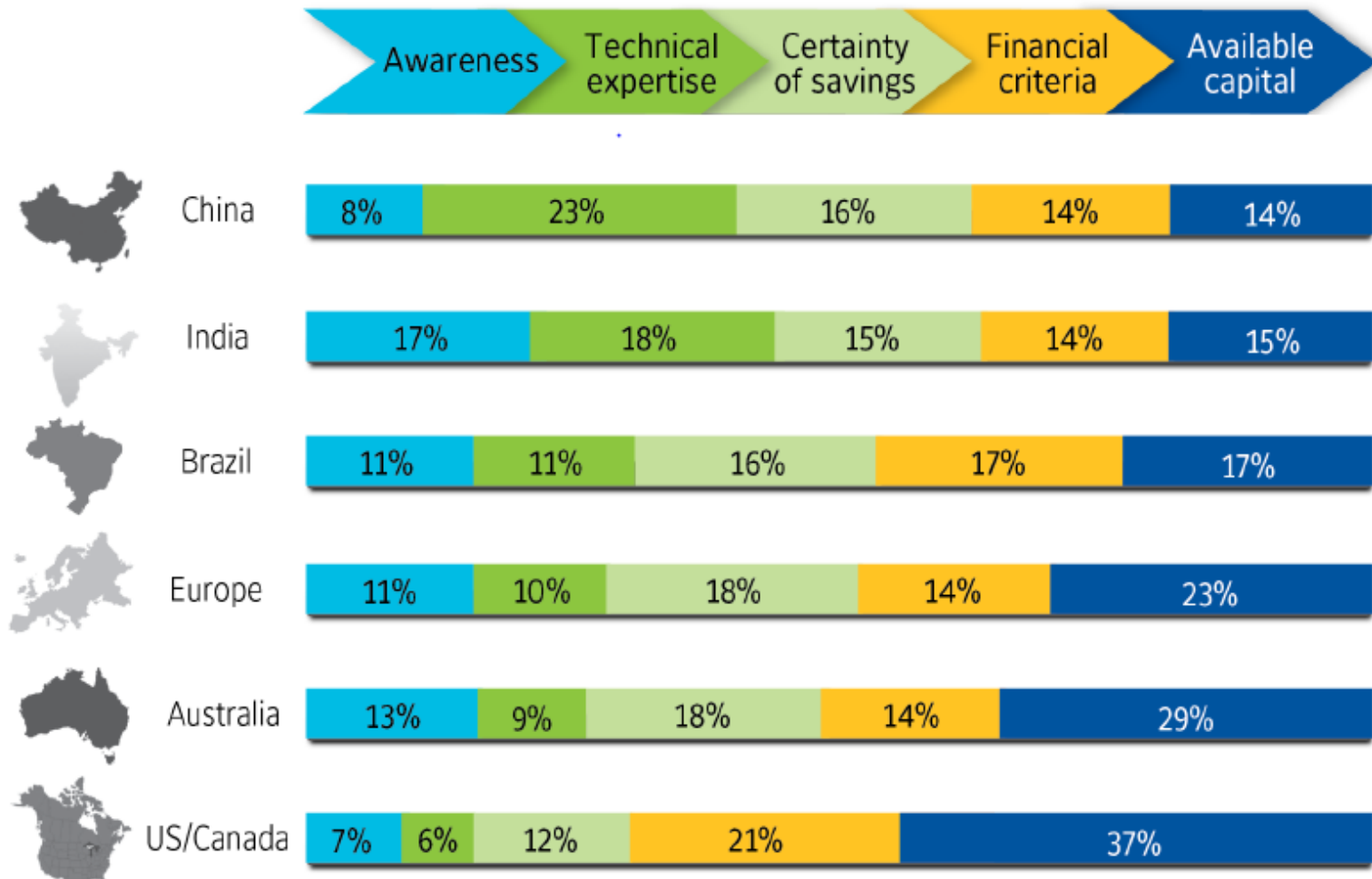
What is the top barrier to pursuing energy efficiency for your company/organization?



Source: Institute for Building Efficiency

PACE tackles key barriers

What is the top barrier to pursuing energy efficiency for your company/organization?



PACE solves a variety of problems

Reason for not spending on energy efficiency

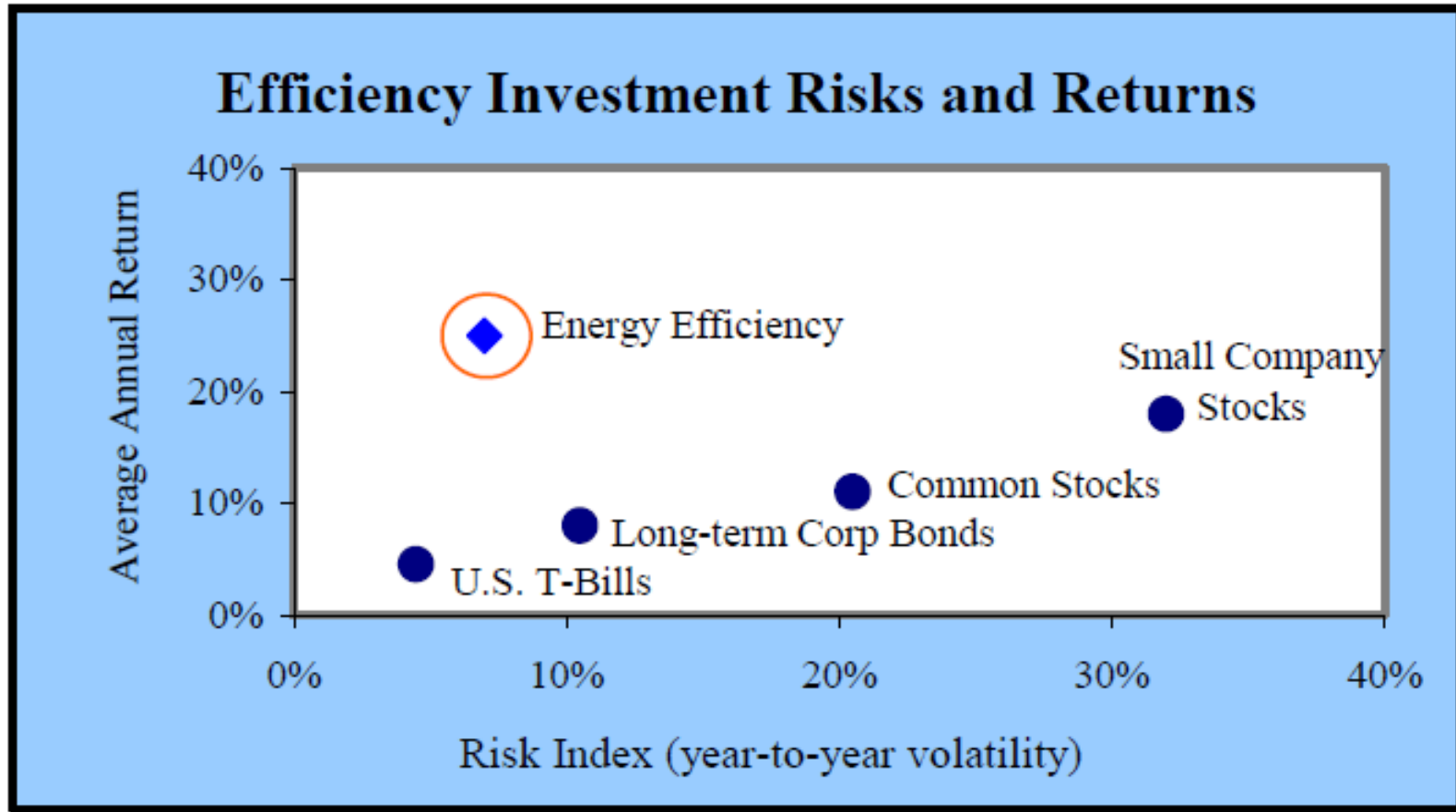
- Lack of capital
- Banks won't lend
- Takes too long to receive ROI
- Lose money if property sold before ROI realized

How PACE fixes it

- Capital available from private sector
- Banks like certainty of PACE loans paid back with senior lien
- PACE projects are cash flow positive on day one
- Debt transfers to new

Efficiency Investments

Figure 2. Efficiency Investments: High Returns, Low Risk.



Source: Vanguard Group for stocks and bonds. ACEEE estimates adapted from the U.S. EPA data for energy efficiency.

Where is PACE happening already?

- Connecticut
- California
- Minnesota
- Michigan
- Florida
- New York
- Ohio
- And soon: TEXAS

**For a complete
list of programs,
see**

<http://pacenow.org/resources/all-programs/>

There is no easy button for PACE

- **But SECO, Keeping PACE in Texas, SPEER, and other organizations are working to make it as easy as possible.**
- **You can get involved with that process.**
- **Or let us know if you'd rather wait and be notified as we produce results which you might want use (model resolutions, standard documents, etc).**
- **Consistency is essential for PACE to work throughout the state.**

Work Ahead

- **Working to provide PACE Toolkit with consistent/standard:**
 - ▶ **Model resolution**
 - ▶ **Consent document**
 - ▶ **Underwriting criteria**
 - ▶ **Measurement and verification of savings**
- **This will take several months. Many details to work through.**
- **We want to do this right the first time!**

So, what's a local government to do?

- **Get involved with working groups. Sign up at:**
<http://www.keepingpaceintexas.org/contact-us/>
- **Read through resources to familiarize yourself with various models for how to implement PACE:**
www.eepartnership.org/financing-clean-energy/
- **Provide input for model resolutions, standards, implementation methods, etc., which can be applied consistently**

City/County Program Team

- **After consistent resolutions, forms, etc. are distributed, local governments may want to convene program teams including:**
 - ▶ **Sr. Staff from Mayor/City Manager/County Judge/County Administrator's office**
 - ▶ **Legal Counsel and/or bond counsel**
 - ▶ **Sustainability office (if applicable)**
 - ▶ **Local water/energy utility (if public/municipal)**
 - ▶ **Tax Collector or staff**
- **Local Elected official(s) to champion PACE is also needed**

Key Decisions

Working groups will be working through these, and many other, questions to arrive at recommendations for consistent implementation:

- **Individual projects only, or portfolio of projects?**
- **List of approved measures or case-by case (or hybrid approach)?**
- **Which standards for contractors?**
- **What type/level of energy audit to require?**

Collaboration

- **Our goals are to make it as easy as possible for local governments and to enable consistent implementation of PACE programs.**
- **SECO, Keeping PACE in Texas, SPEER, and many other organizations and companies will be collaborating to achieve these goals.**
- **Local governments are welcome and invited to participate in collaborative working group efforts.**
- **Participation in working groups is not required to benefit from their results: We are happy to keep you apprised of working groups' progress and share finished products (templates, toolkits, model policies, etc.)**

Key Takeaways

- **Very important that first PACE districts in Texas work very well.**
- **If you want to act quickly, please participate in working groups. Sign up at <http://www.keepingpaceintexas.org/contact-us/>**
- **If you don't want to, or can't participate, we will have more webinars to update you on progress of toolkits, model policies, etc.**
- **Your city/county can make a big difference for constituents and businesses by adopting PACE.**

Contact Information

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Sign up for working groups at:
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Webinar Q&A
<http://seco.cpa.state.tx.us/PACE/>