PACE – A New Financing Option for Industrial Energy, Water and Environmental Projects







AIChE STS Friday Professional Development Webinar January 15, 2021

PRESENTER

DUB TAYLOR – COO, TEXAS PACE AUTHORITY



Joined the Texas PACE Authority in February 2020, after 21 years as the director of the Texas State Energy Conservation Office (SECO)

- <u>Sponsors industrial energy/water forums with AIChE STS</u>
 - Industrial Energy Efficiency Program (UH Energy)
 - Texas Industries of the Future (UT Austin)
- Industrial Energy Technology Conference (Texas A&M)

Prior to public service, private sector experience was focused in commercial real estate, property appraisal and property tax consulting



AGENDA

- >What is PACE? Where is PACE?
- C&I Market Drivers/Challenges/Opportunities
- >State Authorization, Local Adoption Model
- >Uniform Standards & Program Guidelines
- Project Roles And Participants
- Case Studies
- ➢ Resources



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WHAT IS TX-PACE?

TEXAS PROPERTY ASSESSED CLEAN ENERGY (FINANCING) A simple way of paying for capital projects with no money out of pocket

<u>What:</u> Long term, low cost 100% financing for energy efficiency, water conservation and distributed generation projects

<u>Where</u>: Commercial (including non-profit), **industrial** (manufacturing/agricultural) and multi-family (5+units) properties

<u>How</u>: Repaid via special property assessment over the useful life of the improvements

- > State Authorized
- Local Government Enabled
- > Voluntary & Open Market



WHY TX-PACE?

- Improves assets budget neutral/cashflow positive
- > Lowers utility usage/costs
- > Increases net operating income



FINANCIAL IMPACT OF PACE

Increases property value with no capital investment by owner
 Generates positive cash flow immediately



https://www.texaspaceauthority.org/pace-vs-traditional-financing/



WHERE IS PACE?

PACE-enabling legislation active in 36 states plus D.C. Programs active in 24 state plus D.C.





THE GROWING TX-PACE MARKET

COUNTIES

Bastrop County

Brazos County

Comal County

El Paso County

Galveston County

Hays County

Medina County

Milam County

Travis County

Aransas County Bowie County Cameron County Dickens County Fort Bend County Hardin County Jefferson County Midland County Nueces County Tom Green County Willacy County

Bell County Burnet County Dawson County Fisher County Guadalupe County Hidalgo County McLennan County Navarro County San Patricio County Tarrant County Washington County Williamson County

CITIES

City of Amarillo

City of Dallas

Jacinto City

City of Abilene City of Borger City of Corinth City of Farmers Branch City of Houston City of Leon Valley Town of Prosper City of Snyder

City of Boerne City of Castle Hills City of Cameron City of Eagle Pass City of Fredericksburg City of Hondo Johnson City City of Panhandle City of Princeton City of San Antonio City of Rockdale



> 55 PACE local programs 60 % of state population covered





PACE MARKET DATA (U.S.)

- 2,560 C&I projects
- \$2,074 (MM) investment
- 24,000 jobs created

Project Type

- Energy efficiency 49%
- Renewable energy 23%
- Mixed 22%
- Resiliency 7%





TX-PACE BY THE NUMBERS

> \$134 million of investment to date



MEASURE TYPE

Energy Efficiency: 55% / Water Conservation: 33% / Distributed Gen: 12%



COMMON MISCONCEPTIONS - INDUSTRIAL

- PACE is for commercial properties only hospitality, retail, office buildings, apartments
- > PACE is for only smaller projects HVAC, lighting, etc...
- PACE can only be used for equipment not design, engineering, installation and commissioning
- PACE uses government funding with strings attached
- > There's an upper limit on PACE financing
- > I must use contactors and capital providers from a list
- > PACE has deadline can't sync with TAR, shutdowns



INDUSTRIAL SECTOR ENERGY CONSUMPTION





LOW AND STABLE POWER PRICES

Financial (cash flow) barriers have limited wide-scale adoption of energy efficiency and renewable energy measures



Table 9.8 Average Retail Prices of Electricity



Source: U.S. Energy Information Administration



http://www.ercot.com/content/cdr/contours/rtmLmp.html

ESG – RISK MITIGATION

ESG Sector Risk Atlas



https://www.spglobal.com/ratings/en/research/pdf-articles/190603-esg-industry-report-card-chemicals



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HOW DID WE GET HERE?









PACE PROGRAM GUIDELINES



PROPERTY ASSESSED CLEAN ENERGY ACT

Texas Local Gov't Code Sec. 399.002. DEFINITIONS

Qualified Improvement: a permanent improvement fixed to real property and intended to decrease water or energy consumption or demand, including a product, device, or interacting group of products or devices on the <u>customer's side of the meter</u> that uses energy technology to generate electricity, provide thermal energy, or regulate temperature.

Qualified Project: the installation or modification of a qualified improvement.

Real Property: <u>privately owned</u> commercial or <u>industrial real property</u> or residential real property with five or more dwelling units.



PACE - ELIGIBLE IMPROVEMENTS

Projects that reduce energy or water usage or generate energy onsite

Energy

- High efficiency chillers, boilers, and furnaces
- Combustion and burner upgrades
- Heat recovery and steam traps
- Compressed air systems
- > Mechanical system modernization
- Energy management systems and controls
- > High efficiency lighting upgrades
- > Building envelope improvements
- > Mechanical insulation
- > Fuel switching
- Renewable/DG/CHP energy systems

Water

- > High efficiency water heating systems
- > Water conservation systems
- > Wastewater recovery and reuse systems
- Alternate, on-site sources of water (A/C condensate, rainwater, RO reject water, foundation drain water, etc.)
- > On-site improvements to accommodate reclaimed water use
- Water management systems and controls (indoor and outdoor)
- > High efficiency irrigation equipment



PACE - ELIGIBLE SOFT COSTS

PROJECT

- Materials and labor necessary for the installation of a qualified improvement/equipment
- Changes to the existing property that are incidental to the installation
- Design, project development and engineering costs
- Permit fees & inspection fees
- ≻Commissioning costs

FINANCING

Independent Third-Party Review fees, including verification fees

- Legal, consulting and other fees on an actual cost basis
- >Lender's fees
- Program application and administrative fees
- >Any other fees or costs that may be incurred by the property owner incidental to the installation, modification, or improvement



PACE in a BOX TOOLKIT





Working Groups

- 1) Program Design
- 2) Program Underwriting Standards*
- 3) Funding Platform
- 4) Education, Marketing and Training
- 5) Technical Standards*

https://www.keepingpaceintexas.org/pace-in-a-box/

*Under review/update now



TECHNICAL STANDARDS

Based on Nationally Accepted Standards

- > American Society for Testing and Materials (ASTM)
- International Performance Measurement and Verification Protocol (IPMVP)
- American National Standards Institute / Building Owners and Managers Association (ANSI / BOMA)
- American Society of Heating, Refrigerating & Air-Conditioning Engineers (ASHRAE)
- National Institute of Standards and Technology (NIST)

ITPR Qualifications

- Texas-licensed Professional Engineer with energy/water efficiency experience
- Preferred certifications: ASHRAE, AEE, Building Commissioning Association





UNDERWRITING METRICS/QUALIFIERS

Underwriting Criteria	Guideline
Assessment to Assessed Value Ratio	≤20% of the assessed property value. Requests for a variance are evaluated on a case-by-case basis.
Savings to Investment Ratio (SIR)	≥1.0. Requests for a variance are evaluated on a case-by-case basis.
Mortgage Holder Consent	Written consent required from existing mortgage holders.



SAVINGS TO INVESTMENT RATIO (SIR)

SIR = Savings / Investment (1 or greater to qualify for PACE)

<u>Savings</u> – Total energy/water \$ savings over the life of the project/assessment

Investment - Total amount of assessment (financing amount)

*Utility incentives can reduce/create headroom for additional measures

Example: Pumps, motors, controls

Project Cost - \$1,000,000 (including financing costs)

(Utility Incentives - \$50,000)

Project Savings - \$950,000 over 20-year period

 Savings
 \$950,000

 Investment(net)
 \$950,000 = SIR 1



LOCAL ADOPTION PROCESS



City/County/Political Subdivision

- 1) Post **Report** on how PACE program will work
- 2) Public briefing/discussion (optional)
- 3) Pass **Resolution of Intent** to establish PACE program
- 4) Public hearing (required)
- 5) Pass Resolution to Establish PACE program
- 6) Select administrator







CURRENT TX-PACE PROGRAMS

COUNTIES

Bastrop County

Brazos County

Comal County

El Paso County

Galveston County

Hays County

Medina County

Milam County

Travis County

Williamson County

Aransas County
Bowie County
Cameron County
Dickens County
Fort Bend County
Hardin County
Jefferson County
Midland County
Nueces County
Tom Green County
Willacy County

Bell County Burnet County Dawson County Fisher County Guadalupe County Hidalgo County McLennan County Navarro County San Patricio County Tarrant County Washington County

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City of Abilene City of Borger City of Corinth City of Farmers Branch City of Houston City of Leon Valley Town of Prosper City of Snyder

City of Boerne City of Castle Hills City of Eagle Pass City of Fredericksburg City of Hondo Johnson City City of Panhandle City of Princeton City of San Antonio





> 55 PACE local programs 60 % of state population covered





PACE PROGRAM GUIDELINES

TEXAS PACE AUTHORITY

> C 🏠 🔒 texaspaceauthority.org/resources/documents/	0 ☆ ● ●		
TEXAS * PACE	JOIN OUR MAILING LIST		
What is PACE? - Where is PACE? Eligibility - Resources - Events			
DOCUMENTS	QUICK LINKS What is TX-PACE? FAQs Program Documents Case Studies		
PROGRAM DOCUMENTS			
+ PACE in a Box & Latest Updates	Events		
+ PACE Capital Provider Submission of Interest			
+ Contract Templates with the Local Government			
+ Resources for getting Existing Lender Consent			
- The Program Guide and Technical Standards			
Everything you need to complete a PACE project, including the Technical Standards Manual:			
Q Program Guide (English)			
Q Program Guide (Spanish)			

https://www.texaspaceauthority.org/resources/documents/



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How It Works

A Building Owner:



If the owner, building, and project all meet PACE requirements:





TEXAS PACE CAPITAL PROVIDERS

	Greenworks Lending Preferred Financing Range: \$100K - \$5M Types of Projects: Any Eligible Technologies and Properties Geographic Coverage: All of Texas Contact: Sean Ribble www.greenworkslending.com	LIVE OAK BANK	Live Oak Bank Preferred Financing Range: \$500K+ Types of Projects: Flexible Geographic Coverage: All of Texas Contact: Cameron Pappas www.liveoakbank.com	LordCap PACE	LordCap PACE Preferred Financing Range: \$100K+ Types of Projects: All Qualified Projects Geographic Coverage: All of Texas Contact: Joseph J. Lau www.lordcappace.com
	Hannon Armstrong Sustainable Real Estate CounterpointeSRE Preferred Financing Range: \$100K.+ Types of Projects: All Qualified Projects Geographic Coverage: All of Texas Contact: Mark McClure www.counterpointesre.com	EnhancedCapital	Enhanced PACE Finance LLC Preferred Financing Range: \$500K-\$50MM Types of Projects: Any Geographic Coverage: All of Texas Context: Ian McCulley www.enhancedcapital.com	BRENHAM NATIONAL BANK	Brenham National Bank Preferred Financing Range: Up to \$6MM Types of Projects: Commercial Real Estate Geographic Coverage: Counties: Bastrop, Bell, Brazos, Fort Bend, Galveston, Hays, McLennan, Tarrant, Travis, and Williamson, Cities: Cameron, Fredericksburg, Houston & ETJ, and Rockdale Contact: Mke Rudloff
PLG PACE LOAN GROUP	PACE Loan Group Preferred Financing Range: \$250k - \$20mm Types of Projects: Office, Hotel, Retail, Multifamity / Assisted Living, Warehouse Geographic Coverage: Al of Texas Contact: Rafi Gotberstein www.paceloangroup.com Frontier Bank of Texas	Your Bank for Life	TFNB I Your Bank For Life Preferred Financing Range: Up to S1M Types of Projects: All Qualified Projects Geographic Coverage: All of Texas Contact: Alec Burriss www.tfnbtx.com PETROS PACE Finance	🗩 WHITE OAK	888-292-4571 www.bnbank.com White Oak Global Advisors, LLC Preferred Financing Range: \$500,000 - \$150MM Types of Projects: All eligible improvements and property types Geographic Coverage: All of Texas Contact: Jeffry Habicht www.whitesakpace.com
Frontier Bank of Texas	Preferred Financing Range: \$50,000 to \$500,000 Types of Projects: Office, Retail, Watehouse, Flex Geographic Coverage: Properties in Travis, Bastrop, Williamson, and Hays counties Contact: Nichole Aubert www.frontierbankoftexas.com	PLAS CLOSED & PACE	Preferred Financing Range: \$500K+ Types of Projects: All Qualified Projects Geographic Coverage: All of Texas Contact: Mansoor Ghori www.PETROS-PACE.com Dividend Finance	PACE Equity	PACE Equity Finance Preferred Financing Range: \$75K - \$75M Types of Projects: Any Geographic Coverage: All of Texas Contact: Ethan Elser www.pace-equity.com
STONEHILL	Stonehill PACE Preferred Financing Range: >\$1MM+ Types of Projects: All eligible improvements and property types Geographic Coverage: All of Texas Contact: Connor Murch www.stonehilipace.com	DIVIDEND	Preferred Financing Range: \$100,000 to \$20 MM Types of Projects: All commercial property types Geographic Coverage: All of Texas Contact: Peter Grabell www.dividendfinance.com	HAS CLOSED & PACE	Lever Energy Capital Preferred Financing Range: \$200K - \$20M Types of Projects: Any Geographic Coverage: All of Texas Contact: Joel Poppert www.leverenergycapital.com
HALL	Hall Structured Finance Preferred Financing Range: \$15MM - \$90MM Types of Projects: Hospitality, Multi-lamily, Student Housing Geographic Coverage: All of Toxas Contact: cpace/finalstructured com 214-269-9400 CleanFund Commercial PACE Capital	T WAIN	TWAIN Financial Partners Preferred Financing Range: \$500K+ Types of Projects: All Qualified Projects Geographic Coverage: All of Textas Contact: Nick Maglasang www.TwainFinancial.com	Capital LLC	Inland Green Capital Preferred Financing Range: \$100K - \$10MM Types of Projects: All Commercial Property Types and Technologies Geographic Coverage: All of Texas Contact: AnnaMaria Kowalik www.inlandoreancerital.com COCO Preference 14.00
CLEANFUND Commercial PACE Copies	Preferred Financing Range: \$1MM - \$100MM Types of Projects: Any Geographic Coverage: All of Texas	vw.texaspaceauth	ority.org/home/capital-prov	vider-list/	CCG PACE Funding, LLC Preferred Financing Range: \$500K+ Types of Projects: All Qualified Projects, especially those with unique situations that require a customized loan facility Geographic Coverage: All of Texas Contact: Paul Hoffman www.ccgpace.com

THE PACE PROCESS – PROJECTS



*Owner-selects Contractor and ITPR



ENERGY/WATER ANALYSIS

- Performed by Contractor or Engineer
- Conforms to TPA's Technical Standards
- 2 Key Components:
 > Baseline Analysis
 > Projected Savings Analysis

>Uses Energy/Water Assessment Report Template

Cost can be rolled into project



PROPERTY ASSESSED CLEAN ENERGY ACT

Texas Local Gov't Code Sec. 399.011. REVIEW REQUIRED.

(a) A program established under this chapter must require for <u>each proposed</u> <u>qualified project</u>:

(1) a review of <u>water or energy baseline conditions</u> and the <u>projected water</u> or energy savings to establish the projected water or energy savings; and

(2) a <u>verification</u> that a proposed qualified improvement <u>meets the</u> <u>requirements of a qualified project</u>.

(a-1) A verification provided as required under Subsection (a)(2) <u>conclusively</u> <u>establishes</u> that the improvement is a qualified improvement and the project is a qualified project.

(b) <u>After a qualified project is completed</u>, the local government shall require written <u>verification</u> that the qualified project was <u>properly completed</u> and is <u>operating as</u> <u>intended</u>.

(c) A <u>baseline water or energy review</u> or <u>verification review</u> under this section must be conducted by an <u>independent third party</u>.



ITPR REVIEW

Independent Third-Party Reviewer (ITPR)

>Texas-licensed PE with relevant experience/certifications

ITPR review has 2 parts:

- 1) "BEFORE" Review of baseline, savings projections + site visit (photos)
- 2) "AFTER" Verification that project is installed and operating as intended (site visit photos)



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▶Resources



TX-PACE PROJECT DIVERSITY

- Urban and rural
- Office, mixed-use, non-profit, hospitality, multifamily, parking garage, retail
- Energy efficiency, water conservation, distributed generation & demand reduction/resiliency projects
- Project sizes: \$68,000 \$24,000,000
- > All received 100% financing





1225 NORTH LOOP WEST Houston



Measures:

- > HVAC
- > BAS
- LED lighting

Utility Incentives: \$30,000

Assessment Total: \$1,304,352

Utility Savings: 38% Annually





BUTLER BROTHERS BUILDING - DALLAS

Measures:

- > HVAC
- > Lighting
- Insulation, roof
- > Windows
- Plumbing fixtures

Incentives:

\$21 million Historic Tax Credits

Assessment Total:

\$23.9 million

Annual Utility Savings: 40%

Electric: 6.6 million kWh Water: 700K gallons







CAPITAL STACK APPROACH: DEVELOPER





SIMON PROPERTY GROUP El Paso County, Hays County, Travis County, Williamson County, City of Houston



SIMON®









Measures

- > HVAC
- Lighting
- > Water

Assessment Total \$9 Million

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PACE is a WIN-WIN-WIN (WIN-WIN)

- <u>Property Owners</u> lower utility bills, energy independence, energy efficiency, property value increase
- <u>Contractors</u> source of increase in business, more local hiring, best practices, keeping up with technology advancements
- Lenders new loans, steady & stable process, fully collateralized, Tax Assessment lien position, improved asset value
- <u>State of Texas</u> reduced peak demand, enhanced grid reliability, distributed generation as resilient power source, improved air quality, water resource conservation
- <u>Communities</u> increased economic development and jobs, improved building infrastructure, more appealing building stock and plants



KEY TAKEAWAYS – FINANCIAL

>PACE Financing

- > is not a balance sheet liability (land secured assessment)
- >doesn't tie up a company's line of credit
- >increases a plant's value/performance/environmental
- >doesn't have to be paid off at sale tied to land
- >can be paid for over a longer time
 - >life of equipment versus typical bank 5-year term
 - >cash flow positive day one



KEY TAKEAWAYS – PROGRAMMATIC

There are resources to help both the contractor and the customer through the process
 Not on you own with unfamiliar paperwork

Communities across Texas are looking to PACE to spur property upgrades, achieve air quality and environmental goals, and enhance economic development

PACE can open doors to conversations with new and existing customers that lead to new business





- Texas PACE Authority: www.texaspaceauthority.com
 - TX-PACE Program Guide and Technical Standards www.texaspaceauthority.org/Documents/Program%20Guide.pdf?dl=0
 - Events and Training (Online Contractor Training Soon!) www.texaspaceauthority.org/event-directory

Case Studies

www.texaspaceauthority.org/resources/case-studies-marketing/

> Industrial Overview

https://www.texaspaceauthority.org/wp-content/uploads/2018-02-22_Industrial-Case-Studies.pdf



QUESTIONS?

Dub Taylor, COO Texas Pace Authority <u>dub@texaspaceauthority.org</u>



www.TexasPACEAuthority.org