

PACE

PROPERTY ASSESSED CLEAN ENERGY

ENERGY & WATER EFFICIENCY

HOW TO PAY FOR IT

www.texaspaceauthority.org

DUB TAYLOR, CEO TEXAS PACE AUTHORITY



- Joined the Texas PACE Authority in February 2020
- 27 years with the State of Texas
 - 21 years as the director of the Texas State Energy Conservation Office (SECO) in Texas Comptroller of Public Accounts
 - Managed energy, engineering, technical assistance and energy/water efficiency loan programs for public entities
- Prior private sector experience in commercial real estate, property management, appraisal and property tax consulting

WHY PACE?



PROBLEMS FACING PROPERTY OWNERS

Property owners/managers know they can save money over the long haul by investing in energy/water-efficient upgrades, **but...**

- **Even modest upgrades are expensive**
 - Hard to pay those upfront costs given other expenses
 - Tight ROI for internal capital
- **Failing equipment replaced on emergency, piecemeal basis**
 - Premium cost with no systems optimization

PROBLEMS FACING PROPERTY OWNERS

- New construction “value engineering”
 - Less visible MEP targeted
 - Short term gain, long term pain
- Higher borrowing costs - increasing gaps in project capital stacks
- Higher energy/water costs



SOLUTION: PROPERTY ASSESSED CLEAN ENERGY

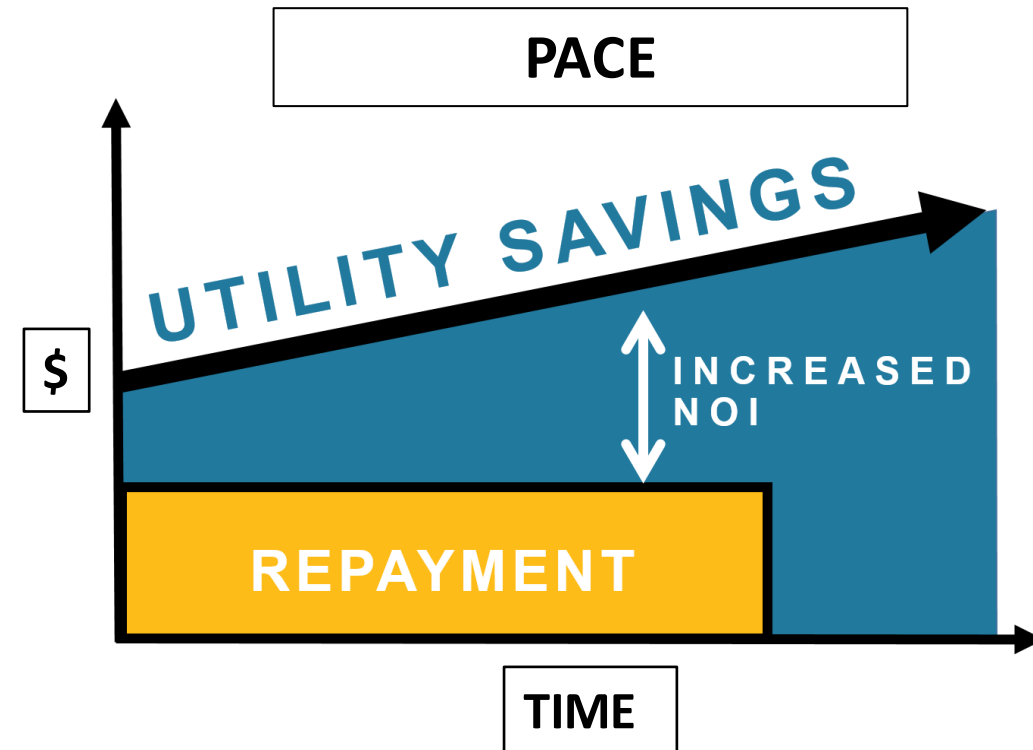
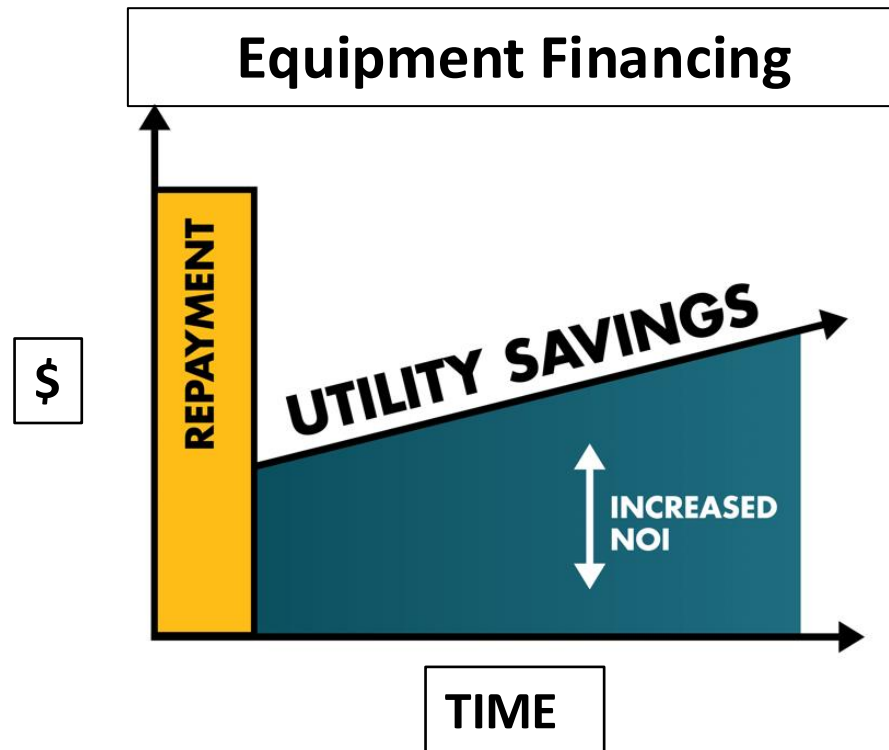
*Innovative financing tool that provides **long term, low cost, 100% funding** for energy efficiency, water conservation and distributed generation projects*

- Private financing secured by a special local property assessment in place over the financing term/useful life of the improvements
 - Assessment runs with the land
 - “Like a single parcel PID”
- State Authorized – [Texas Local Government Code Chapter 399](#)
- Voluntary & Open Market
- Local Government Enabled

PROPERTY OWNER BENEFITS

Pay for today's upgrades with tomorrow's savings

- Improves assets - budget neutral/cashflow positive



DEVELOPMENT FINANCE TOOLS

Tool	What It Funds	Who Pays	Typical Use
PID Public Improvement District)	Public infrastructure	Property owners in district	Development & place-making
MUD (Municipal Utility District)	Water, sewer, utilities	Residents via taxes & rates	Suburban residential growth
TIRZ (Tax Increment Reinvestment Zone)	Reinvestment using tax increment	Incremental tax revenue	Urban redevelopment
PACE (Property Assessed Clean Energy)	Energy/water improvements	Property owner via assessment	Individual C&I property retrofits & new builds

LOCAL GOVERNMENT ADOPTION



MUNICIPALITY OR COUNTY

- Public briefing/discussion (optional)

1st Meeting

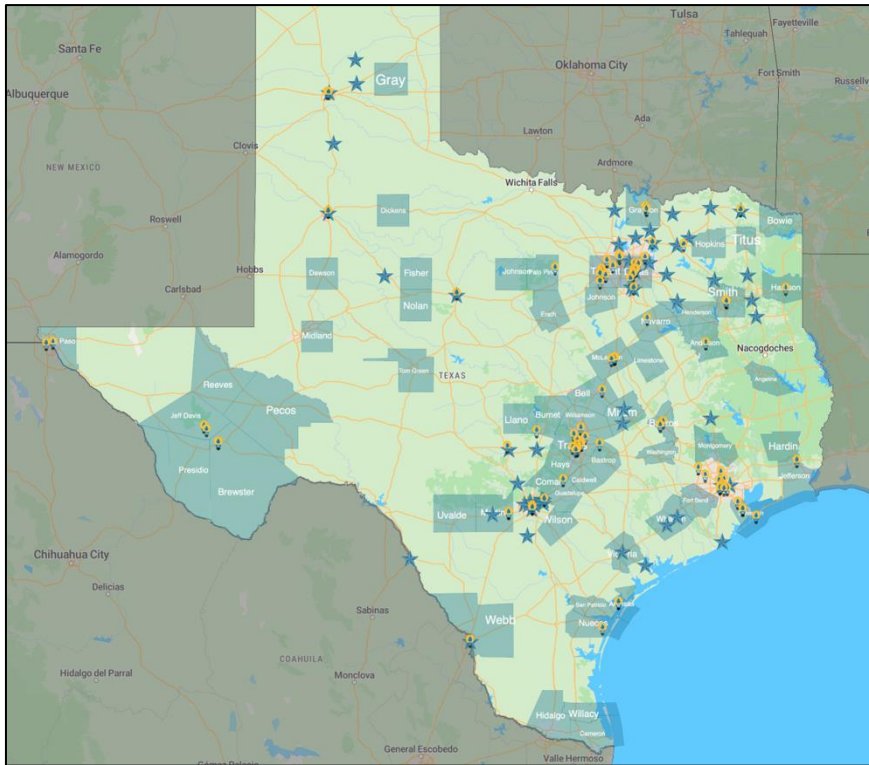
- Post **Report** on how PACE program will work
- Pass **Resolution of Intent** to establish PACE program

2nd Meeting

- Public hearing (required)
- Pass **Resolution to Establish** PACE program
- Engage program administrator via **Services Agreement**

THE GROWING TEXAS PACE MARKET

www.texaspaceauthority.org/service-areas/



**September
2026**

**114 PACE
Programs
53 City
61 County**

**75% of Texas
population
covered**



**Municipalities
& Counties**



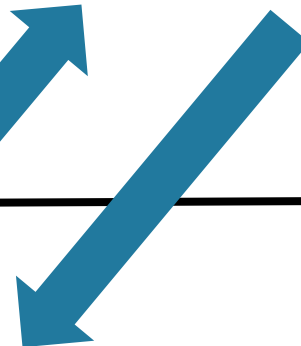
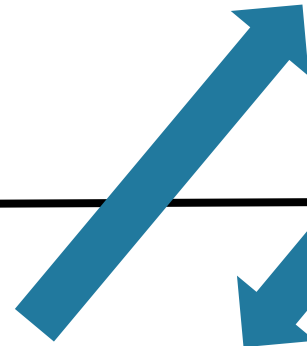
**TEXAS PACE
AUTHORITY**

501(c)(3)



Governmental

Private



Capital Providers



Property Owners

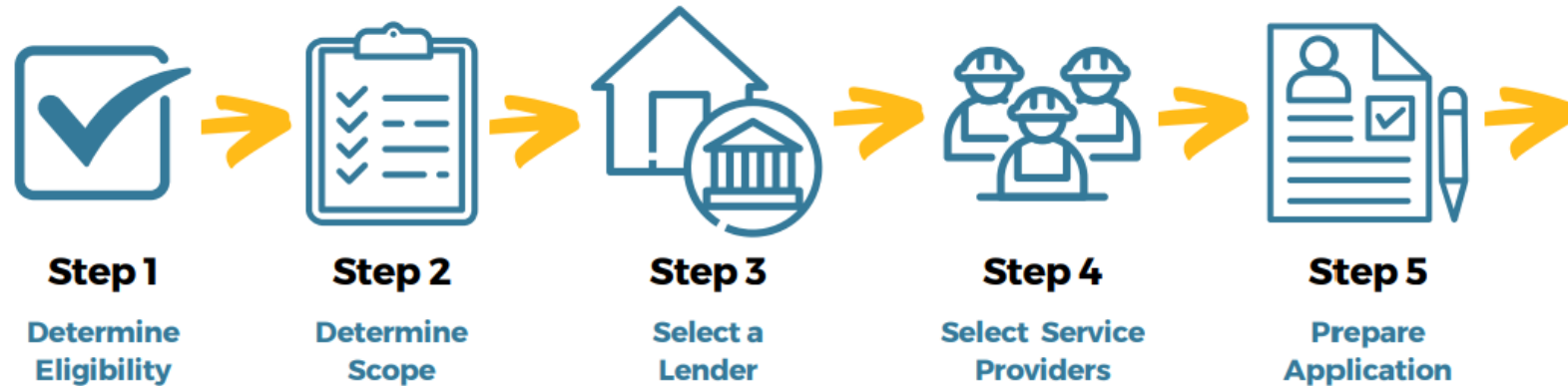


Service Providers

PACE PROJECT DEVELOPMENT PROCESS

www.texaspaceauthority.org/quick-start-guide

Phase 1 Pre-Application Feasibility



Phase 2 Post-Application Execution



PACE ELIGIBLE PROPERTY – ALL PRIVATE

- Commercial
 - Retail, hospitality, mixed use, office, medical, non-profit
- Multi-family (5+ units)
- Industrial – warehouse/distribution
- Manufacturing
- Agricultural
- Data Centers – onsite power/water

*Single family (4 units or less) not eligible

PACE ELIGIBLE USES

- **Retrofit/Repurposing**
 - New MEP systems, building envelope upgrades, water conservation, onsite generation, energy storage
- **New Construction/Redevelopment**
 - Above code, higher performance systems
- **Refinancing/Recapitalization**
 - Within 24 months of last PACE eligible improvement

PACE ELIGIBLE IMPROVEMENTS

Projects that reduce energy or water usage or generate power onsite

Energy

- High efficiency HVAC (AC/chillers, boilers, furnaces, air handlers)
- High efficiency lighting upgrades
- Energy management systems and controls
- Building envelope improvements
- Renewable/DG energy systems
- Mechanical system modernization
- Air cooled systems to water or geothermal cooled systems
- Fuel switching
- Combustion and burner upgrades
- Heat recovery and steam traps

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 UNDERWRITING CRITERIA

Savings to Investment Ratio (SIR)

- $SIR \geq 1$ required
 - Utility/Operating Savings >50% --- Financial Savings < 50%
 - Verified by Independent Third Party (Texas Licensed PE)

Loan to Value (LTV)

- PACE financing can be up to **35%** of CAD-assessed property value
 - Variance for market value/as stabilized basis

Loan Term

- $\leq$ to weighted useful life of PACE-financed measures

Mortgage Holder Consent

- Senior lender must consent to PACE assessment (if applicable)

PACE PROJECT DIVERSITY

- 114 projects totaling \$800 million
- Urban and rural
- Office, mixed-use, non-profit, hospitality, multi-family, parking garage, retail, manufacturing
- Energy efficiency, water conservation, distributed generation & demand reduction projects
- Project sizes: \$68,000 - \$64,000,000



PACE PROJECT IMPACTS

www.texaspaceauthority.org/project-list/



114

PACE Programs
Established in Texas



114

Projects
Completed



\$ 805,333,602

Dollars
Invested



10,317

Jobs
Created



89,313,255

Energy Saved
(kWh/yr)



148,255,330

Water Saved
(Gal/yr)



103,718

Natural Gas Saved
(mmBTU/yr)



51,710

CO2 Reduced
(tonnes/yr)

PACE PROJECT LIST

www.texaspaceauthority.org/project-list/

Search:				
Photo	Project Title & Type	PACE Program & Location	Capital Provider	Assessment & Project Measures
	The Code, 2026 <i>Hospitality, Refinancing</i> View Project Overview	Travis County	Nuveen Green Capital	\$53,946,693 Lighting (Interior LEDs), Building Envelope (Window & Storefront Upgrade), Other UCRM (Elevator Upgrade), Building Envelope (Wall Upgrade), Building Envelope (Roof Upgrade), Lighting (Exterior LEDs), HVAC (Upgrade), Water Efficiency (DHW Heater), Water Efficiency (DHW - Low Flow Fixtures), Indirect Costs/Soft Costs (Soft Costs)
	501 Elm Lofts, 2026 <i>Multifamily, Redevelopment</i> View Project Overview	Dallas, City of	Nuveen Green Capital	\$16,005,500 Water Efficiency (Low Flow Fixtures, Domestic Hot Water Heater), HVAC (HVAC Upgrade), Lighting (Interior LEDs)
	Hyatt Centric, 2026 <i>Hospitality, Redevelopment</i> View Project Overview	Travis County (Austin)	Peachtree Group	\$64,290,208 Building Envelope (Walls, Roof, Windows), HVAC, Water Efficiency (Domestic Hot Water, High Efficiency Water Fixtures), Lighting, Other (Elevator Upgrade/Replace)
	Horseshoe Bay Project, 2026 <i>Multifamily, New Construction</i> View Project Overview	Llano County (Horseshoe Bay)	Nuveen Green Capital	\$38,553,304 Lighting (Interior & Exterior LEDs), Water Efficiency (Low Flow Fixtures, Water Heater), Building Envelope (Windows, Roof, Wall Upgrades), HVAC
	Soapy Falls Car Wash Pflugerville, 2026 <i>Retail, New Construction</i> View Project Overview	Travis County (Pflugerville)	PACE Equity Finance, LLC	\$1,352,361 Building Envelope (Roof, Walls, Windows, Door Insulation), Electrical (LED Lighting, Ancillary Equipment, Motors & Controls), HVAC (Heat Pump, Duct Work & Controls), Water Efficiency (Plumbing, Reclamation, Controls, Fixtures & Water Heater)

PROJECT OVERVIEW

Meuse Hotel

Location	City of Fredericksburg
PACE Assessment	\$53,200,000 (Petros PACE Finance) October 2025: \$733,835
Project Type	Hospitality, New Construction
Improvements	Building Envelope, Electrical, Water Efficiency
Impact	Electricity Savings: 485,886 kWh/yr Water Savings: 3,901,000 gal/yr Natural Gas Savings: 1,504 MMBtu/yr CO ₂ Reduction: 333 tonnes/yr
Jobs Created	688 TX-PACE Jobs



↓ **20%**
Energy Cost

↓ **26%**
Water Cost



PROJECT OVERVIEW

The Monarch Hotel

Date	September 15th, 2023
Location	City of San Antonio
PACE Assessment	\$48,475,000 (Nuveen Green Capital)
Project Type	Hospitality, New Construction
Improvements	Building Envelope, HVAC, Lighting, Water Efficiency, Indirect Costs/Soft Costs
Impact	Electricity Savings: 1,119,970.00 kWh/yr Water Savings: 1,436,000 gal/yr CO ₂ Reduction: 582.79 tonnes/yr
Jobs Created	627 TX-PACE Jobs



↓ **25%**
Energy Cost

↓ **48%**
Water Cost



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PROJECT OVERVIEW

Tide on 35

Location	Aransas County (Rockport)
PACE Assessments	\$10,541,255 (Peachtree Group) Nov 2021: \$7,660,808 Nov 2023: \$1,165,739, Refinance Dec 2024: \$1,714,708, Refinance
Project Type	Multifamily, New Construction
Improvements	Building Envelope, Electrical, Lighting, Appliances, Water Efficiency
Impact	Electricity Savings: 1,140,121 kWh/yr Water Savings: 4,021,000 gal/yr CO ₂ Reduction: 593.28 tonnes/yr
Jobs Created	223 TX-PACE Jobs



↓ **33%**
Energy Cost

↓ **30%**
Water Cost



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PROJECT OVERVIEW

Barton Creek Square Mall

Date	September 30th, 2016
Location	Travis County (Austin)
PACE Assessment	\$1,239,878 (Petros PACE Finance)
Project Type	Retail, Retrofit
Improvements	HVAC, LED Lighting, Low-Flow Faucets, Water Efficiency
Impact	Electricity Savings: 1,163,235.00 kWh/yr Water Savings: 658,000 gal/yr CO ₂ Reduction: 605.31 tonnes/yr
Jobs Created	16 TX-PACE Jobs



↓ **39%**
Energy Cost

↓ **16%**
Water Cost



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PROJECT OVERVIEW

Holland Hotel

Date	March 9th, 2026
Location	Brewster County (Alpine)
PACE Assessment	\$2,280,000 (Peachtree Group)
Project Type	Hospitality, Redevelopment
Improvements	Building Envelope, HVAC, Electrical, Lighting, Water Efficiency
Impact	Electricity Savings: 383,196 kWh/yr Water Savings: 251,000 gal/yr CO ₂ Reduction: 199 tonnes/yr
Jobs Created	29 TX-PACE Jobs



↓ **38%**
Energy Cost

↓ **65%**
Water Cost



**Peachtree
Group**



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PROJECT OVERVIEW

Buddy Holly Hall

Date	September 27th, 2022
Location	City of Lubbock
PACE Assessment	\$20,864,230 (Twain Financial Partners)
Project Type	Recreational (Nonprofit), Redevelopment
Improvements	Building Envelope, Electrical/Mechanical, Domestic Hot Water
Impact	Electricity Savings: 2,965,134.00 kWh/yr Water Savings: 4,401.00 gal/yr CO ₂ Reduction: 1,542.96 tonnes/yr
Jobs Created	270 TX-PACE Jobs



↓ **45%**
Energy Cost

↓ **31%**
Water Cost



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PROJECT OVERVIEW

Republic Elite Manufacturing

Date	June 3rd, 2024
Location	Harrison County (Marshall, TX)
PACE Assessment	\$1,500,000 (White Oak Global Advisors)
Project Type	Industrial, Redevelopment
Improvements	HVAC, Equipment, Lighting
Impact	Electricity Savings: 3,101,617 kWh/yr CO ₂ Reduction: 1,614 tonnes/yr
Jobs Created	19 TX-PACE Jobs
Recognition	PACEsetter Award - Innovative deal under \$5 million (PACENation 2025 Summit)



↓ **25%**
Reduction in Energy Cost



REPUBLIC
ELITE



White Oak
Global Advisors, LLC



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AUTHORITY

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CASE STUDY

PROJECT OVERVIEW

702 LLC

Date	May 15th, 2025
Location	City of Houston
PACE Assessment	\$4,000,000 (Imperial Ridge)
Project Type	Multifamily, Redevelopment
Improvements	Roof, HVAC, LED Lighting, Solar PV, Plumbing Fixtures, Domestic Hot Water
Impact	Electricity Savings: 2,195,896 kWh/yr Water Savings: 7,864,000 gal/yr Natural Gas Savings: 2,011 MMBtu/yr CO ₂ Reduction: 1,249 tonnes/yr
Jobs Created	52 TX-PACE Jobs



↓ **111%**
Energy Cost

↓ **74%**
Water Cost



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PROJECT OVERVIEW

Hyatt Centric

Date	June 17th, 2026
Location	Travis County (Austin)
PACE Assessment	\$64,290,208 (Peachtree Group)
Project Type	Hospitality, Redevelopment
Improvements	Building Envelope (Walls, Roof, Windows), HVAC, Water Efficiency (Domestic Hot Water)
Impact	Electricity Savings: 413,241 kWh/yr Natural Gas Savings: 3,199 MMBtu/yr CO ₂ Reduction: 215 tonnes/yr
Jobs Created	831 TX-PACE Jobs



↓ **25%**
Energy Cost

↓ **28%**
Nat. Gas Cost



HYATT
CENTRIC™



Peachtree
Group



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PROJECT OVERVIEW

501 Elm Lofts

Date	July 2nd, 2026
Location	City of Dallas
PACE Assessment	\$16,005,500 (Nuveen Green Capital)
Project Type	Multifamily, Redevelopment
Improvements	Water Efficiency (Low Flow Fixtures, DHW Heater), HVAC (HVAC Upgrade), Lighting (Interior LEDs)
Impact	Electricity Savings: 113,692 kWh/yr Water Savings: 1,130,850 gal/yr Natural Gas Savings: 4,079 MMBtu/yr CO ₂ Reduction: 275 tonnes/yr
Jobs Created	207 TX-PACE Jobs



↓ **17%**
Energy Cost

↓ **43%**
Water Cost



nuveen
GREEN CAPITAL



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PROJECT OVERVIEW

Soapy Falls Car Wash

Date	April 9th, 2026
Location	Travis County (Pflugerville)
PACE Assessment	\$1,352,361 (PACE Equity Finance, LLC)
Project Type	Retail, New Construction
Improvements	Building Envelope (Roof, Walls, Windows, Door Insulation), Electrical (LED Lighting, Ancillary Equipment, Motors & Controls), HVAC (Heat Pump, Duct Work & Controls), Water Efficiency (Plumbing, Reclamation, Controls, Fixtures & Water Heater)
Impact	Electricity Savings: 485,886 kWh/yr Water Savings: 3,901,000 gal/yr Natural Gas Savings: 1,504 MMBtu/yr CO ₂ Reduction: 333 tonnes/yr
Jobs Created	8 TX-PACE Jobs



↓ **64%**
Energy Cost

↓ **19%**
Water Cost



PACEEquity



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PROJECT OVERVIEW

3936 W Vickery

Date	December 12th, 2025
Location	Tarrant County (Fort Worth)
PACE Assessment	\$500,000 (Imperial Ridge)
Project Type	Retail, Retrofit
Improvements	Partial Roof Replacement, Window Tinting, Insulated Ceiling Tiles, HVAC RTUs & Controls, LED Lighting, Rooftop Solar, Low-Flow Toilets
Impact	Electricity Savings: 31,768 kWh/yr Water Savings: 70,000 gal/yr CO ₂ Reduction: 17 tonnes/yr
Jobs Created	6 TX-PACE Jobs



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PROJECT OVERVIEW

B&B Theatres Red Oak 12

Date	November 17th, 2022
Location	City of Red Oak
PACE Assessment	\$6,413,023 (Nuveen Green Capital)
Project Type	Recreation, New Construction
Improvements	Building Envelope, HVAC, Lighting, Water Efficiency
Impact	Electricity Savings: 261,131 kWh/yr Water Savings: 4,200,000 gal/yr CO ₂ Reduction: 136 tonnes/yr
Jobs Created	83 TX-PACE Jobs



↓ **6%**
Energy Cost

↓ **40%**
Water Cost



**B&B THEATRES
RED OAK 12**

nuveen
GREEN CAPITAL



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PROJECT OVERVIEW

Princeton Self Storage

Date	May 25th, 2021
Location	City of Princeton
PACE Assessment	\$2,895,206 (Petros PACE Finance)
Project Type	Industrial
Improvements	Building Envelope, Electrical
Impact	Electricity Savings: 190,708 kWh/yr CO ₂ Reduction: 99 tonnes/yr
Jobs Created	37 TX-PACE Jobs



↓ **46%**
Reduction in Energy Cost



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PROJECT OVERVIEW

The Shops at Redbird

Date	April 26th, 2021
Location	City of Dallas
PACE Assessment	\$3,350,000 (Twain Financial Partners)
Project Type	Retail, Redevelopment
Improvements	HVAC, Electrical, Water Efficiency
Impact	Electricity Savings: 673,784 kWh/yr Water Savings: 3,420,000 gal/yr CO ₂ Reduction: 351 tonnes/yr
Jobs Created	43 TX-PACE Jobs



↓ **49%**
Energy Cost

↓ **74%**
Water Cost



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CASE STUDY

PROJECT OVERVIEW

Continental Gin

Date	September 5th, 2019
Location	City of Dallas
PACE Assessment	\$5,250,000 (Twain Financial Partners)
Project Type	Mixed-Use Retail & Office, Redevelopment
Improvements	Roof, Walls, Windows, Wall Upgrades, HVAC, Electrical, LED Lighting, Solar PV, Elevator
Impact	Electricity Savings: 1,497,434.00 kWh/yr Water Savings: 515,000 gal/yr Natural Gas Savings: 11,124.00 MMBtu/yr CO ₂ Reduction: 1369 tonnes/yr
Jobs Created	68 TX-PACE Jobs



↓ **67%**
Energy Cost

↓ **82%**
Water Cost



City of Dallas

THE
**CONTINENTAL
GIN BUILDING**

TWAIN
FINANCIAL PARTNERS



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CASE STUDY

PROJECT OVERVIEW

Hilton Garden Inn

Date	November 8th, 2019
Location	Tarrant County (Grapevine)
PACE Assessment	\$6,655,000 (Twain Financial Partners)
Project Type	Hospitality, Retrofit
Improvements	Insulation, HVAC, LED Lighting
Impact	Electricity Savings: 1,605,245 kWh/yr Water Savings: 2,497,000 gal/yr Natural Gas Savings: 1,069 MMBtu/yr CO ₂ Reduction: 892 tonnes/yr
Jobs Created	86 TX-PACE Jobs



↓ **52%**
Energy Cost

↓ **30%**
Water Cost



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PROJECT OVERVIEW

Congregation Beth Israel

Date	February 16th, 2016
Location	Travis County (Austin)
PACE Assessment	\$446,361 (Petros PACE Finance)
Project Type	Religious (Nonprofit), Retrofit
Improvements	Window Film, HVAC, Building Controls
Impact	Electricity Savings: 135,088.00 kWh/yr Natural Gas Savings: 99 MMBtu/yr CO ₂ Reduction: 79.87 tonnes/yr
Jobs Created	6 TX-PACE Jobs



↓ **20%**
Reduction in Energy Cost



In Alliance with **Apollo**



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CASE STUDY

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

✓ **Property Owners**

Lower utility costs • Increased resilience • Improved energy & water efficiency • Higher property value

✓ **Contractors**

Financing that closes projects • More local work • Technology adoption • Repeat business

✓ **Lenders**

New lending opportunity • Standardized process • Strong collateral • Enhanced asset value

✓ **State of Texas**

Water conservation • Reduced peak demand • Grid reliability • Distributed generation • Improved air quality

✓ **Communities**

Economic development • Job creation • Modernized buildings • Stronger tax base

RESOURCES

- **Texas PACE Authority** www.texaspaceauthority.com
 - TX-PACE Program Guide and Technical Standards
www.texaspaceauthority.org/Documents/Program%20Guide.pdf?dl=0
 - Case Studies
www.texaspaceauthority.org/resources/case-studies-marketing/
 - Service Provider Directory
<https://www.texaspaceauthority.org/service-provider-directory/>
 - Events and Training
www.texaspaceauthority.org/event-directory



QUESTIONS?

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TEXAS PACE ACT

Texas Local Government Code 399

SB385 (83R - 2013) Carona/Keffer

Senate: 30-0

House: 133-14-2

Signed by Governor Perry 6/14/2013

HB3187 (84R - 2015) Keffer-Workman/Lucio

House: 138-1-1

Senate: 29-2

Signed by Governor Abbott 6/16/2015