

PAYING FOR TODAY'S UPGRADES

with

TOMORROW'S SAVING

Property Assessed Clean Energy (PACE)

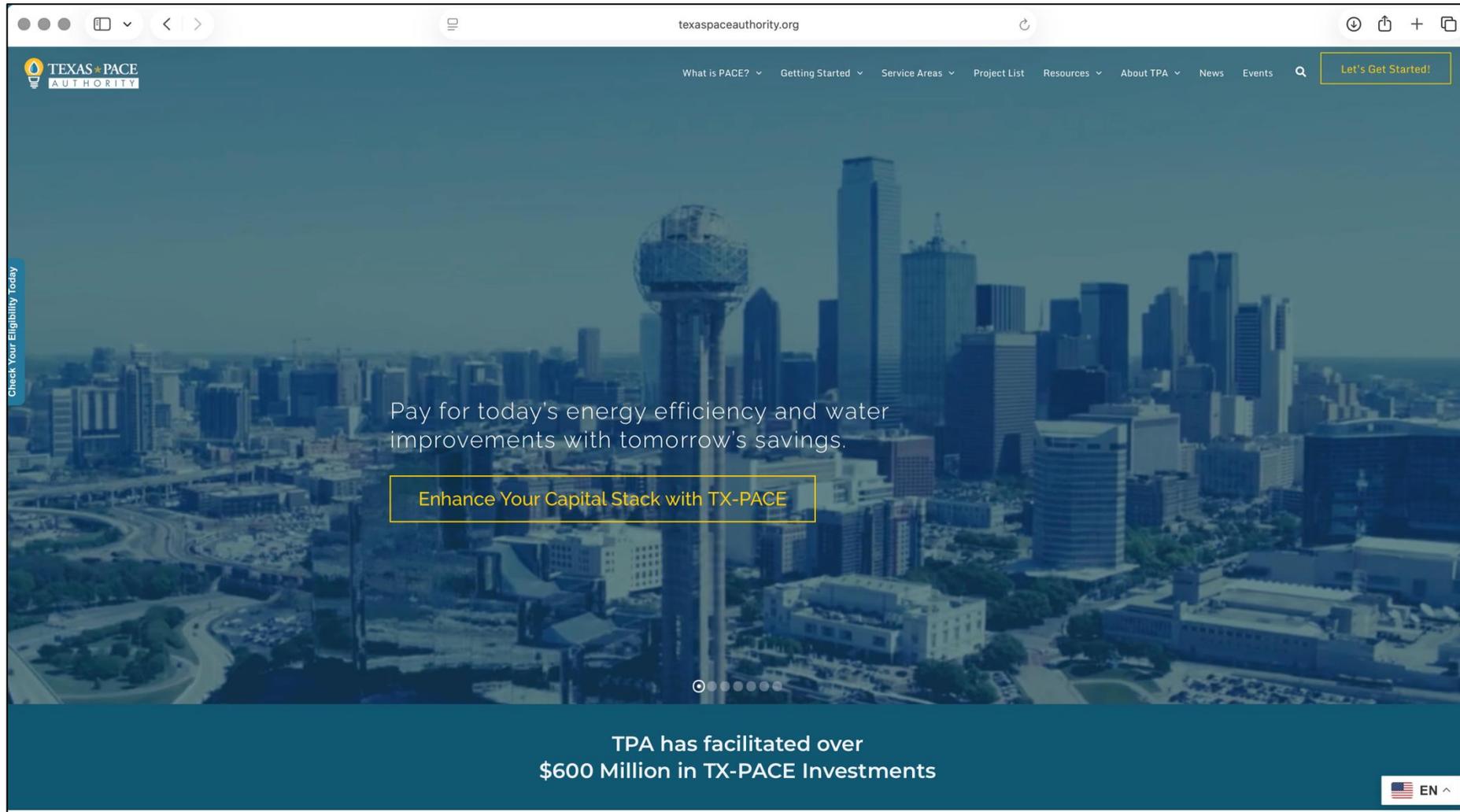


DUB TAYLOR, CEO TEXAS PACE AUTHORITY



- 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

www.texaspaceauthority.org



THE PROBLEM(s)

Property owners and facility 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
- New construction “value engineering” targets less visible MEP
- Higher borrowing costs - increasing gaps in project capital stacks

SOLUTION: PROPERTY ASSESSED CLEAN ENERGY

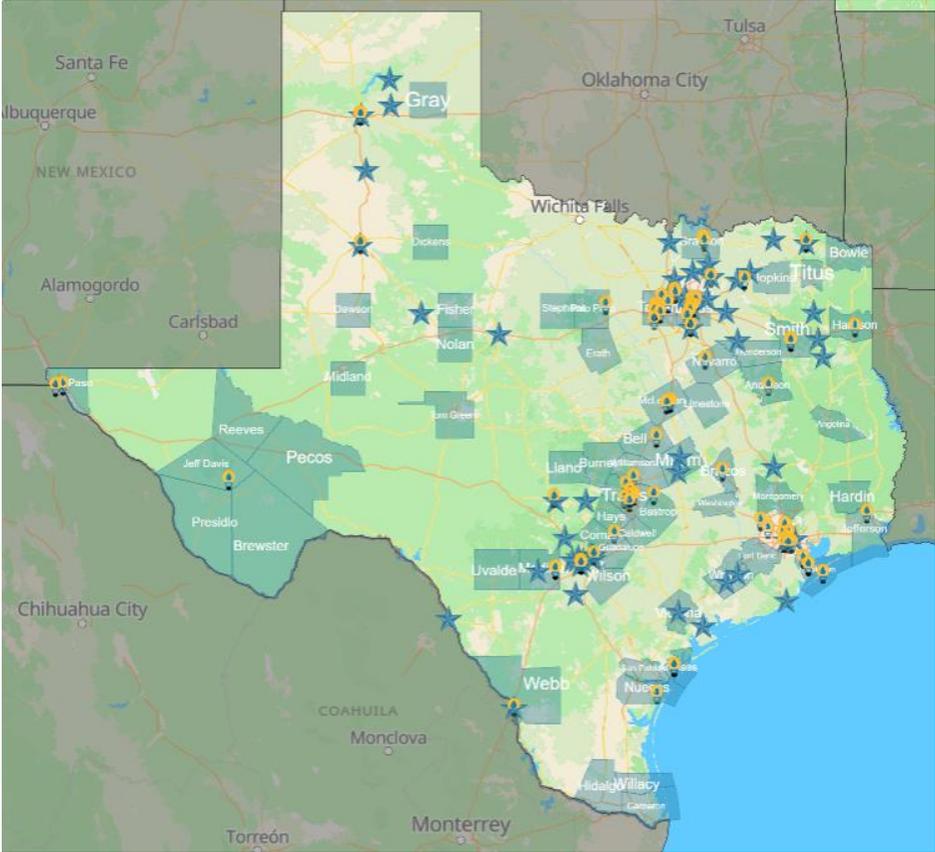
*Innovative financing tool that provides **long term, low cost, 100% funding** for energy efficiency, water conservation and distributed generation projects*

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

THE GROWING TEXAS PACE MARKET

www.texaspaceauthority.org/service-areas/

February 2025
110 PACE Programs
50 City - 60 County
75% of Texas' population covered



Municipalities
Counties



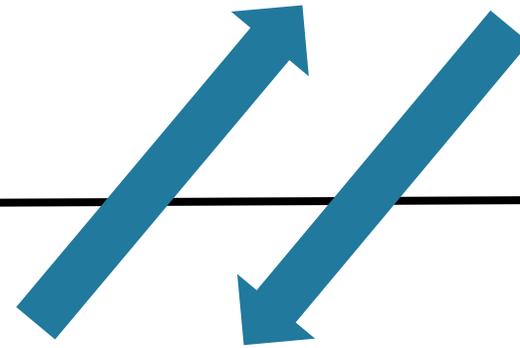
TEXAS PACE
AUTHORITY

501(c)(3)



Governmental

Private



Capital Providers



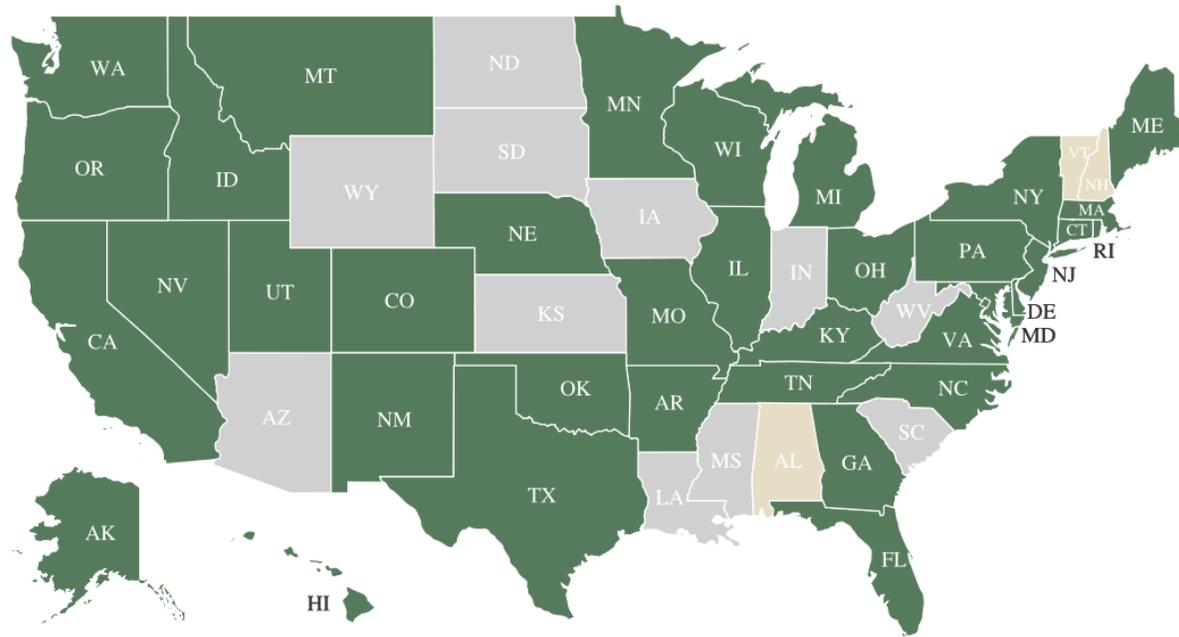
Property Owners



Service Providers

PACE NATIONALLY

www.pacenation.org



Map key



Active program(s)



Program in development



PACE-enabled

PACE ELIGIBLE PROPERTY

➤ **Commercial**

- Retail, hospitality, mixed use, office, recreation, non-profit

➤ **Residential Multi-family**

- 5+ units
- Single family (≤ 4 units not eligible)

➤ **Industrial**

- Warehouse/distribution

➤ **Manufacturing**

➤ **Data Centers**

➤ **Agricultural**

➤ **Ground Lease & Leasehold**

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 (chillers, boilers, furnaces, air handlers)
- High efficiency lighting
- Energy management systems and controls
- Building envelope improvements
- Air cooled systems to water or geothermal cooled systems
- Onsite energy systems/CHP
- Process heaters, compressors, pumps, blowers
- Combustion and burner upgrades
- Heat recovery and steam traps

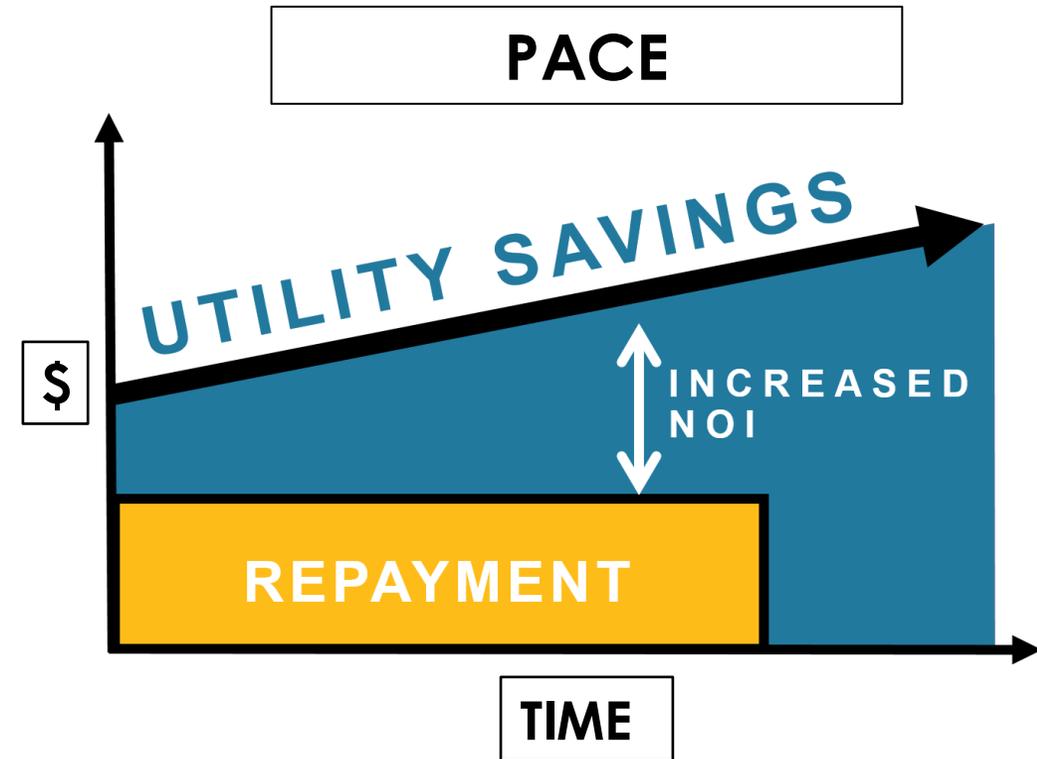
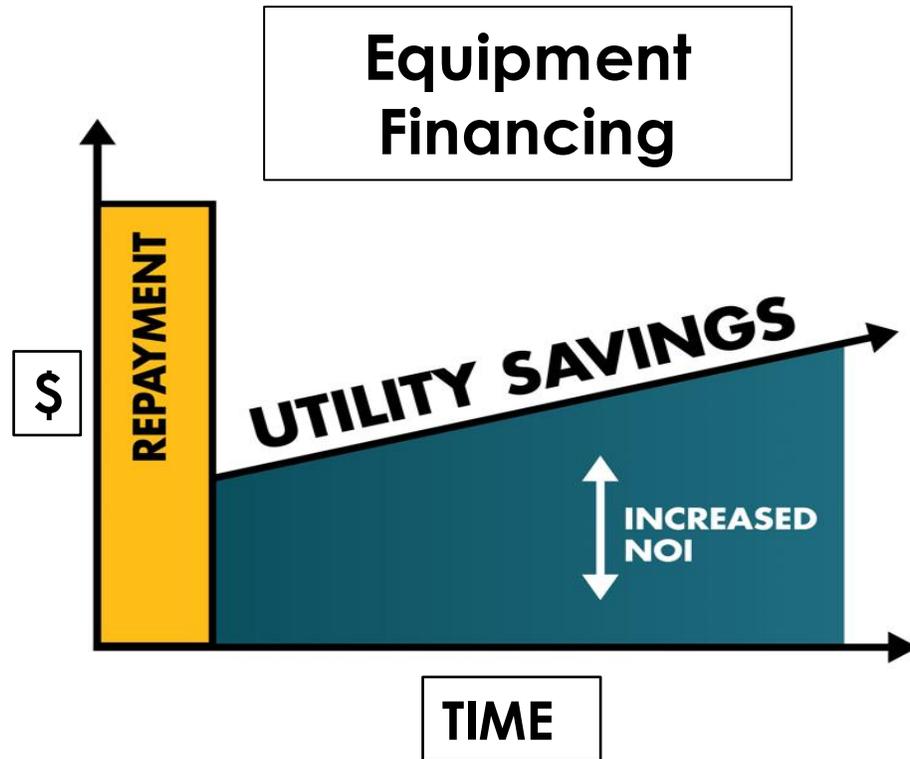
Water

- 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

PROPERTY OWNER BENEFITS

“Pay for today’s upgrades with tomorrow’s savings”

- Improves assets - budget neutral/cashflow positive



PACE PROJECT IMPACTS

www.texaspaceauthority.org/project-list/



PACE PROJECT LIST

	<p>The Lumin at Lake Walk, 2025 <i>Office, New Construction</i></p>	<p>Brazos County</p>	<p>Bayview PACE</p>	<p>\$14,943,253</p>	<p>Building Envelope, Electrical, HVAC, Water Efficiency</p>
	<p>Little Pioneer School, 2025 <i>Mixed Use Office & Retail, Redevelopment</i></p>	<p>Anderson County</p>	<p>Imperial Ridge Real Estate Capital</p>	<p>\$725,000</p>	<p>HVAC, Building Envelope (Windows, Roof, and Wall Upgrades), Lighting (Interior and Exterior Lighting Upgrades), Water Efficiency (Plumbing - Low Flow Fixtures), Renewables/Distributed Generation (Solar PV)</p>
	<p>Shady Grove Baptist Church, 2025 <i>Nonprofit - Religious</i></p>	<p>Greenville, City of</p>	<p>Imperial Ridge Real Estate Capital</p>	<p>\$322,765</p>	<p>Renewables/Distributed Generation (Solar PV System)</p>
	<p>The Meuse Hotel, 2025 <i>Hospitality</i></p>	<p>Fredericksburg, City of</p>	<p>Petros PACE Finance</p>	<p>\$53,200,000</p>	<p>Building Envelope, Water Efficiency, Electrical (Lighting)</p>
	<p>The Welman Project, 2025 <i>Retail</i></p>	<p>Tarrant County (Fort Worth)</p>	<p>Imperial Ridge Real Estate Capital</p>	<p>\$231,000</p>	<p>Lighting (Lighting & Electrical Upgrades), Building Envelope (Window Tinting), Renewables/Distributed Generation (Solar PV System), HVAC (HVAC Upgrades), Water Efficiency (Water Heater Upgrade)</p>
	<p>Intercontinental Hotel II, 2025 <i>Hospitality</i></p>	<p>San Antonio</p>	<p>Nuveen Green Capital</p>	<p>\$20,336,288</p>	<p>Building Envelope (Envelope Improvements), HVAC (Improved HVAC Efficiency), Electrical (Electrical / Lighting Improvements), Water Efficiency (Plumbing & Water Conservation)</p>

PACE PROJECTS – Multifamily

	Central Plaza Downtown Living, 2020	<u>Bell County</u>	Temple	\$1,025,000	<u>Petros PACE Finance Titling Trust</u>	Multifamily	LED, Envelope, Roof, Mechanical, Domestic Water Heating
	Pearl Point (Tide on 35 Apartments), Phase I, 2020	<u>Aransas County</u>	Rockport	\$4,000,000	<u>Stonehill PACE</u>	Multifamily	LED, Envelope, Water Conservation Measures
	Pearl Point (Tide on 35 Apartments), Phase II, 2021	<u>Aransas County</u>	Rockport	\$7,660,808	<u>Stonehill PACE</u>	Multifamily	LED, Envelope, Water Conservation Measures
	Bishop Canopy, 2022	<u>Dallas County</u>	Dallas	\$1,595,864	<u>Nuveen Green Capital</u>	Multifamily	Envelope, Electrical/Lighting, HVAC, Water Conservation
	Wilcox Lofts, 2023	<u>Smith County</u>	Tyler	\$1,412,500	<u>Nuveen Green Capital</u>	Multifamily	Envelope, HVAC, Lighting, Plumbing and Water Conservation

PACE PROJECTS – Medical



Clarksville General Hospital, 2023

Clarksville, City of

Clarksville

\$5,500,000

TransPecos Bank

Healthcare

Lighting, HVAC, Electrical, Building Envelope



Beaumont Behavioral Health, 2022

Jefferson County

Beaumont

\$3,965,700

Imperial Ridge Real Estate Capital

Medical

Envelope, lighting, HVAC, Water Conservation



Tyler Regional Hospital, 2022

Smith County

Tyler

\$8,500,000

Counterpointe SRE

Medical

HVAC, Interior Infrastructure, Exterior Infrastructure, Central Sterile

PACE PROJECTS - Hospitality

	Barfield Hotel, 2018	Amarillo, City of	Amarillo	\$7,347,580	Twain Community Partners II LLC	Hospitality	HVAC, LED, Envelope, Plumbing, Water Conservation Measures
	Plaza Hotel, 2019	El Paso County	El Paso	\$9,200,353	Nuveen Green Capital	Hospitality	HVAC, LED, Envelope, Elevators, Plumbing
	Kimpton Harper Hotel, 2019	Tarrant County	Fort Worth	\$5,811,875	Twain Community Partners II LLC	Hospitality	Lighting, HVAC, Domestic Water Heating
	Hilton Garden Inn, 2019	Tarrant County	Grapevine	\$6,655,000	Twain Community Partners II LLC	Hospitality	HVAC, LED, Envelope, Plumbing
	Sinclair Hotel, 2020	Tarrant County	Fort Worth	\$8,219,116	Twain Community Partners II LLC	Hospitality	HVAC, LED, Envelope, Plumbing
	Alta Frontera, 2022	Jeff Davis	Fort Davis	\$3,407,183	Nuveen Green Capital	Hospitality	Envelope, Lighting, HVAC, Plumbing and Water Conservation
	Intercontinental Hotel, 2022	San Antonio, City of	San Antonio	\$28,000,000	Nuveen Green Capital	Hospitality	Envelope, HVAC, Lighting, Plumbing & Water Conservation
	Monarch Hotel, 2023	San Antonio, City of	San Antonio	\$48,475,000	Nuveen Green Capital	Hospitality	Envelope, HVAC, Lighting, Water Conservation
	JW Marriott II, 2023	Dallas, City of	Dallas	\$13,909,789	PACE Equity LLC	Hospitality	HVAC, Electrical, Building Envelope
	Hotel Herringbone, 2024	McLennan County	Waco	\$3,271,340	PACE Equity LLC	Hospitality	Envelope, Electrical, HVAC, Water Efficiency

PACE PROJECTS - Recreation

	Downtown Cowtown at the Isis Theatre, 2019	<u>Tarrant County</u>	Fort Worth	\$2,383,000	<u>UMB Bank</u>	Recreation (Nonprofit)	Space Heating & Cooling, Pumps, Heat Rejection, Fans- Interior, LED, Plumbing, Water Conservation Measures
	Buddy Holly Hall, 2022	<u>Lubbock, City of</u>	Lubbock	\$20,864,230	<u>Twain Financial Partners</u>	Recreation (Nonprofit)	HVAC, Lighting, Building Envelope, Plumbing
	Racing & Altitude Trampoline Park, 2020	<u>Galveston County</u>	Texas City	\$1,060,000	<u>Nuveen Green Capital</u>	Recreation	HVAC, LED, Envelope
	Red Oak Ali's Cinema, 2022	<u>Red Oak, City of</u>	Red Oak	\$6,413,023	<u>Nuveen Green Capital</u>	Recreation	Envelope, Electrical/Lighting, HVAC, water conservation

PACE PROJECTS – Manufacturing



**Republic Elite
(Trajus), 2024**

Harrison
County

Marshall

\$1,500,000.00

White Oak
Global
Advisors LLC

Industrial

HVAC, Electrical, Water
Efficiency



**R. J. Liebe Athletic
Lettering Company,
2017**

Navarro
County

Corsicana

\$324,560

Nuveen
Green Capital

Industrial

HVAC, LED

PACE PROJECTS - Religious



**Congregation
Beth Israel,
2016**

Travis
County

Austin

\$446,361

Petros PACE
Finance

Religious
(Nonprofit)

Chillers, Boilers,
Window Film, BAS
Controls



**New Birth
Baptist Church,
2021**

Tarrant
County

Fort Worth

\$152,130

Nuveen Green
Capital

Religious
(Nonprofit)

Solar PV



**First UU Church,
2022**

Houston,
City of

Houston

\$488,120

Nuveen Green
Capital

Religious
(Nonprofit)

Envelope, Lighting,
HVAC, Solar

PACE PROJECTS - Retail

	Barton Creek Mall, 2016	Travis County	Austin	\$1,239,878	Petros PACE Finance	Retail	HVAC, LED, Water Conservation Measures
	Lakeline Mall, 2016	Williamson County	Cedar Park	\$765,394	Petros PACE Finance	Retail	HVAC, LED, Water Conservation Measures
	Round Rock Outlets, 2016	Williamson County	Round Rock	\$1,002,588	Petros PACE Finance	Retail	HVAC, Water Conservation Measures
	Houston Premium Outlets, 2017	Houston, City of	Cypress	\$2,185,038	Petros PACE Finance	Retail	HVAC, LED, Smart Glass, Awnings, Plumbing, Water Conservation Measures
	San Marcos Premium Outlets, 2017	Hays County	San Marcos	\$1,884,449	Petros PACE Finance	Retail	HVAC, LED, Plumbing, Water Conservation Measures
	Elgin General Store, 2018	Bastrop County	Elgin	\$120,000	Frontier Bank of Texas	Retail	Solar PV
	Mall of the Mainland, 2020	Galveston County	Texas City	\$3,840,000	Nuveen Green Capital	Retail	HVAC, LED, Envelope, Plumbing
	World Gym, 2021	Galveston County	Texas City	\$3,075,000	Greenworks Lending LLC by Nuveen	Retail	HVAC, LED, Envelope, Plumbing, Water Conservation Measures
	Vickery Blvd., 2023	Tarrant County	Fort Worth	\$280,000.00	Imperial Ridge Real Estate Capital	Retail	Building Envelope, Solar PV
	The Welman Project - Remodel, 2025	Tarrant County	Fort Worth	\$231,000	Imperial Ridge Real Estate Capital	Retail	Lighting, Building Envelope, Renewables/Distributed Generation, HVAC, Water Efficiency

PACE PROJECTS – Senior Living



**Stonecreek at
Copperfield, 2020**

Houston,
City of

Houston

\$2,800,000

Counterpointe
SRE

Multifamily
(Senior)

HVAC, Lighting,
Envelope, Domestic
Water Heating



**Grand Living at the
Grove, 2022**

Travis
County

Austin

\$12,000,000

PACE Loan
Group

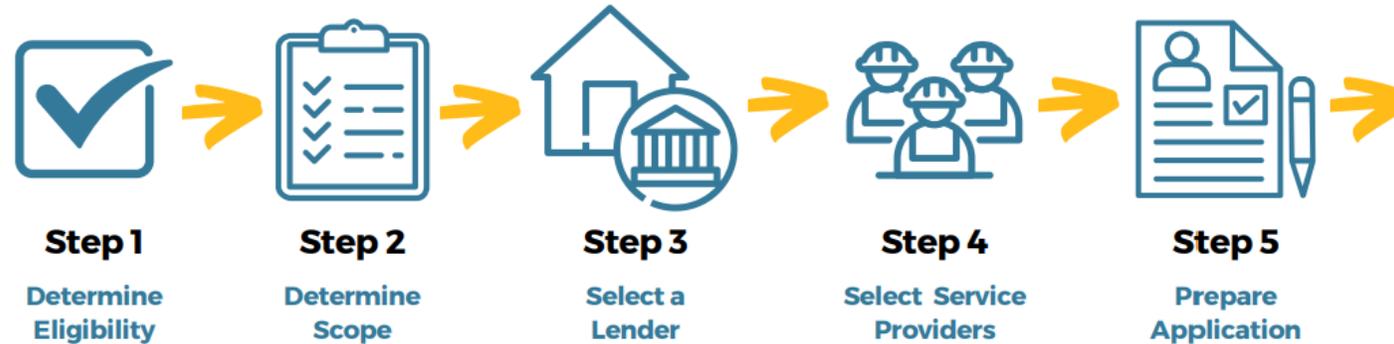
Multifamily
(Senior)

Envelope, Windows,
HVAC, Water
Conservation,
Domestic Hot Water,
Lighting, Controls

TPA's PROJECT DEVELOPMENT PROCESS

www.texaspaceauthority.org/quick-start-guide

Phase 1 Pre-Application Feasibility



Phase 2 Post-Application Execution



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 (non-accelerating)

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

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

RESOURCES

- **Texas PACE Authority:** www.texaspaceauthority.org
 - 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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www.texaspaceauthority.org