

#### AABC Commissioning Group AIA Provider Number 5011116

#### Introduction to PACE: Funding for Energy Efficiency and Distributed Energy Projects

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Course Description

PACE programs—which utilize a voluntary property tax assessment to secure funding—cover 100% of the cost for energy efficiency, water conservation, and distributed energy projects. To date, projects totaling \$883MM have been funded through the PACE program, which is now available in 36 states. This session—which includes two case studies—will discuss how PACE works, what types of improvements qualify and how much funding is available.



Learning Objectives

At the end of the this course, participants will be able to:

- 1. Understanding what the PACE Funding program is, where it is available, and its value to property owners.
- 2. Learn key due diligence points and the process for applying and being approved for funding.
- 3. Understand the PACE financial model through presented case studies including roof + solar and lighting, and how through PACE the projects achieved a positive ROI within the first year.
- 4. Understand the dynamics at play when determining return on investment (ROI) and the critical impact this has on both PACE financing and fulfilling project needs.



## **Typical Challenge**



- 125,000 ft<sup>2</sup> Facility
- Needs New Roof
- Cheapest Quote \$550K
- Limited Capital
- Payback Target < 3 Years</li>



## **Typical Outcome?**

- 1. CEO forgoes the 3 year payback target and approves the \$550K
- 2. CEO approves \$110K to just make repairs
- 3. CEO approves internal resources to purchase patches and tar to make repairs
- 4. CEO kicks the can down the road and says, "Maybe next year."









Source: 2016 NFMT Energy Management Survey

## **Desired Outcome**

- 1. You secure funding without incurring any out-of-pocket costs
- 2. You get a new roof, additional insulation, and a 25 year warranty
- **3. You install a 1 MW solar array on the new roof**
- 4. You hit your payback targets within the 1st year
- 5. You achieve a positive ROI for 25 years with maintenance and inverter costs included

## **Desired Outcome**

- 6. Net cash-flow increases without incurring any additional balance-sheet liabilities
- 7. CEO throw's you a big party and sends you to Hawaii





# "PACE"

# **Property Assessed Clean Energy Funding Program**





- Developed Property Tax Assessments in 1736
- Funds infrastructure improvements
- Mandatory and paid by those who benefit – Cost shared with owners
- Secured by property, not owner
- Sold or Default Transfers to next property owner









Cisco DeVrie

- Developed PACE Property Tax Assessments in 2008
- Considers buildings "infrastructure"
- Only funds EE, WC, and RE projects
- Voluntary Paid by building owner
- Secured by property, not owner
- Sold or Default Transfers to next property owner









# PACE What is it? Where is it? How does it work? What can it be used for?



## Funding Program For Building Improvements

Energy

Water

#### Renewable







#### Efficiency Conservation

Energy



#### State Law





## Adopted Locally





## **Secured By Property**

#### No Personal Guarantee







#### Non Recourse

#### **Runs With The Land**









#### Long Term

#### **Fixed Rate**



## Repaid as Property Tax



## No Down Payment Required





#### Covers 100% of Projects Costs (Equipment & Services)





#### **Savings > Cost**



#### Includes Maintenance and End of Life Costs





Real Property Not Personal
Increases Property Value





# ✓ Expense - Not a Debt ✓ No Affect on Credit ✓ No Affect on Borrowing





✓ No Affect on Incentives
✓ No Affect on Tax Credits
✓ Depreciation Allowed



# Where is PACE?

#### Originated in California in 2008 Adopted in 35 U.S. States & DC





Source: 2019 PACENation

## Where is PACE?

#### Originated in California in 2008 Adopted in 35 U.S. States & DC Expanded Into Other Countries





Expanded to Canada & Europe



Source: 2019 PACENation

## What Projects Qualify?

#### Varies State to State

- ✓ Facility Upgrades
- ✓ New Construction
- Process Improvements
- ✓ Refinancing of Prior Projects





## What Technologies Qualify?

#### With some exceptions....

# If an energy savings can be calculated, it will most likely qualify









## Who Funds PACE?

- Varies State to State
  - ✓ Bonds
  - ✓ Self Funding
  - Private Equity
  - Traditional Funding





## **How Much is Available?**

- Typically 20% 30% PACE Fair Market Value (FMV)
- ✓ Property Value
- ✓ Loan to Value (LTV)
- ✓ Annual Energy Spend
- ✓ % of Value by Lender
- ✓ % of Value by PACE District



## **How Much is Available?**

#### Allowable PACE Assesment Table

Property Value	PACE Assessment Allowed *	
	With Mortgage	Without Mortage
\$250,000	\$61,000	\$102,500
\$500,000	\$122,000	\$205,000
\$1,000,000	\$244,000	\$410,000
\$2,000,000	\$488,000	\$820,000
\$5,000,000	\$1,220,000	\$2,050,000
\$7,500,000	\$1,830,000	\$3,075,000
\$10,000,000	\$2,452,200	\$4,120,500
\$15,000,000	\$3,660,000	\$6,150,000

\* Estimates Only - Established by PACE Lender

\* Varies by PACE District & PACE Lender



## Who Qualifies for PACE?



#### **Property in PACE District**



## Although varies by state....

# PROFIL





#### For profit, non profit, & Government owned buildings <u>may</u> qualify



#### Business is in Good Standing





#### Not Delinquent on Mortgage or Property Tax



## Although varies by lender and PACE district....

# **Total LTV**





#### Why Does PACE Work? Cost vs Payback (Traditional Funding)

95% of Companies Require < 7 Year Simple Payback



### Why Does PACE Work? **Cost vs Payback (PACE)**

95% of Companies Require < 7 Year Simple Payback



**Payback Years** 



## **Success of PACE**

#### **Commercial PACE**





Source: 2019 PACENation

#### **100% FINANCING**

- ✓ 100% of costs covered
- ✓ No money down
- ✓ Internal funds can be reallocated
- ✓ Available to nonprofits





#### FIXED RATE & LONG TERMS

- ✓ Financing terms of 20-30 years
- Allows for capital intensive & comprehensive projects beyond low-hanging fruit
- ✓ Increases net cash flow





#### SOLVES SPLIT INCENTIVES

- ✓ Assessments can be passed on to tenants
- ✓ Tenants also save on energy costs
- ✓ Tenants savings to cost ratio >1.0





#### TRANSFERABILITY

- ✓ Attached to the building, not the building owner
- ✓ Freedom to sell ~ Assessment transfers to new owner
- ✓ Removes risk in capital investment
- Does not carry typical debt constraints





#### **REDUCES COST OF CAPITAL**





#### **INCREASES FINANCIAL PERFORMANCE**

- ✓ An expense, not long-term liability
- Increases property value
- ✓ No acceleration of assessment by lender allowed
- ✓ Improvements can:
  - Attract talent
  - > Improve productivity
  - > Retain employees
  - Decrease tenant turnovers
  - Generate economic development



## **Case Studies**



#### Case Study #1 Roof Replacement + 1 MW Solar Array

#### Case Study #2 Comprehensive Lighting Replacement + Controls





- Purchased 125,000 ft<sup>2</sup> environmentally controlled distribution center
- Original roof in very poor condition with little or no insulation
- Limited capital budget and 2.5 year payback target
- > \$500K to replace and \$110K to repair
- Not meeting corporate sustainability targets
- Average energy cost \$0.081 per kWh





**Developed proposal that included:** 

- ✓ New roof with 25 year warranty
- ✓ Additional insulation
- ✓ 1 MW rooftop solar array with 25 year panel warranty







- ✓ Secured \$2.3MM in PACE funding
- ✓ 25 year term @ 7% fixed rate
- ✓ 100% project costs covered & no out of pocket costs incurred
- ✓ Included annual maintenance and 20 year inverter end-of-life replacement costs
- ✓ Included 3.1% annual energy cost increase and 2.8% annual inflation rate increase
- ✓ Included Federal tax credits and accelerated depreciation









**Total Project Cost** 

*\$2.3MM* 





#### **Project Financial Summary**

*Total Project Cost Funding Term Funding Rate* 

\$2.3MM 25 Years 7.0%





#### **Project Financial Summary**

Total Project Cost Funding Term Funding Rate Average Annual Savings Annual Payments \$2.3MM 25 Years 7.0% \$202,511 (\$195,340)





#### **Project Financial Summary**

Total Project Cost Funding Term Funding Rate Average Annual Savings Annual Payments Lifetime Savings Lifetime Payments \$2.3MM 25 Years 7.0% \$202,511 (\$195,340) \$5,062,802 (\$4,833,500)





#### **Project Financial Summary**

**Total Project Cost Funding Term Funding Rate** Average Annual Savings **Annual Payments** Lifetime Savings Lifetime Payments ROI (Year 1) ROI (10 Years) ROI (25 Years)

\$2.3MM 25 Years 7.0% \$202,511 (\$195,340) \$5,062,802 (\$4,833,500) 479% 54% 1%





- 50 year old 420,000 ft<sup>2</sup> commercial building with multiple tenants
- Variety of interior lighting with a total of (1,796) original fixtures & bulb types
- 12 acre parking lot with (77) 1000W metal halide fixtures and (42) poles and (15) cement bases in very poor condition
- No wireless controls All manual or timer
- Average energy cost \$0.10 per kWh
- Funding and maintenance program





**Developed proposal that included:** 

- ✓ All new LED interior & exterior lighting with 10 year warranty
- ✓ Wireless-mesh controls system
- ✓ All new parking lot light poles
- ✓ Replacement of (15) cement bases
- ✓ 20 year maintenance and end-of-life replacement program





- ✓ Secured \$1.36MM in PACE funding
- ✓ 20 year term @ 7.5% fixed rate
- ✓ 100% project costs covered & no out of pocket costs incurred
- ✓ Included annual maintenance and end-oflife replacement cost program
- ✓ Included 2.5% annual energy cost and annual inflation rate increases
- ✓ Included qualifying utility incentives









**Total Project Cost** 

\$1.36MM





#### **Project Financial Summary**

Total Project Cost Funding Term Funding Rate \$1.36MM 20 Years 7.5%





#### **Project Financial Summary**

Total Project Cost Funding Term Funding Rate Average Annual Savings Annual Payments

\$1.36MM 20 Years 7.5% \$239,561 (\$193,242)





#### **Project Financial Summary**

Total Project Cost Funding Term Funding Rate Average Annual Savings Annual Payments Lifetime Savings Lifetime Payments \$1.36MM 20 Years 7.5% \$239,561 (\$193,242) \$4,791,214 (\$3,864,840)





**Project Financial Summary** 

**Total Project Cost Funding Term Funding Rate** Average Annual Savings **Annual Payments** Lifetime Savings Lifetime Payments ROI (Year 1) ROI (10 Years) ROI (20 Years)

\$1.36MM 20 Years 7.5% \$239,561 (\$193,242) \$4,791,214 (\$3,864,840) 30% 15% 24%



## PACE Program Resources







This concludes The American Institute of Architects Continuing Education Systems Course

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