

Property Assessed Clean Energy

Illinois EE Stakeholder Advisory Group

Steve Frenkel | April 27, 2010

RENEWABLE  FUNDING



“

We are going to make it a lot easier to borrow money. We are doing this by encouraging communities to give you the option to pay the expense of retrofitting your home by paying it back on your property taxes.

”



Why PACE is “going viral”...

Benefits to Building Owners

No upfront cash needed

Competitive cost of capital

Solves credit rating, collateral issues

May be off balance sheet

Allows owners to pass thru retrofit costs to tenants

Benefits to Local Governments

Support local business and job creation

Reduces city's largest carbon source: existing buildings

Tax neutral: no risk to general fund

Benefits to Retrofit Investors

Very secure payback mechanism

Securitizes energy efficiency (2ndary markets)

Diversification via “pooled bond”

Federal loan guarantees are likely

Benefits to First Mortgagees

Positive cash flow improves property owner's ability to service liabilities

Increase valuation and marketability of asset

Annual assessment payment is senior to mortgage in default

Benefits to ESCOs / Contractors

Game-changing for private sector investment

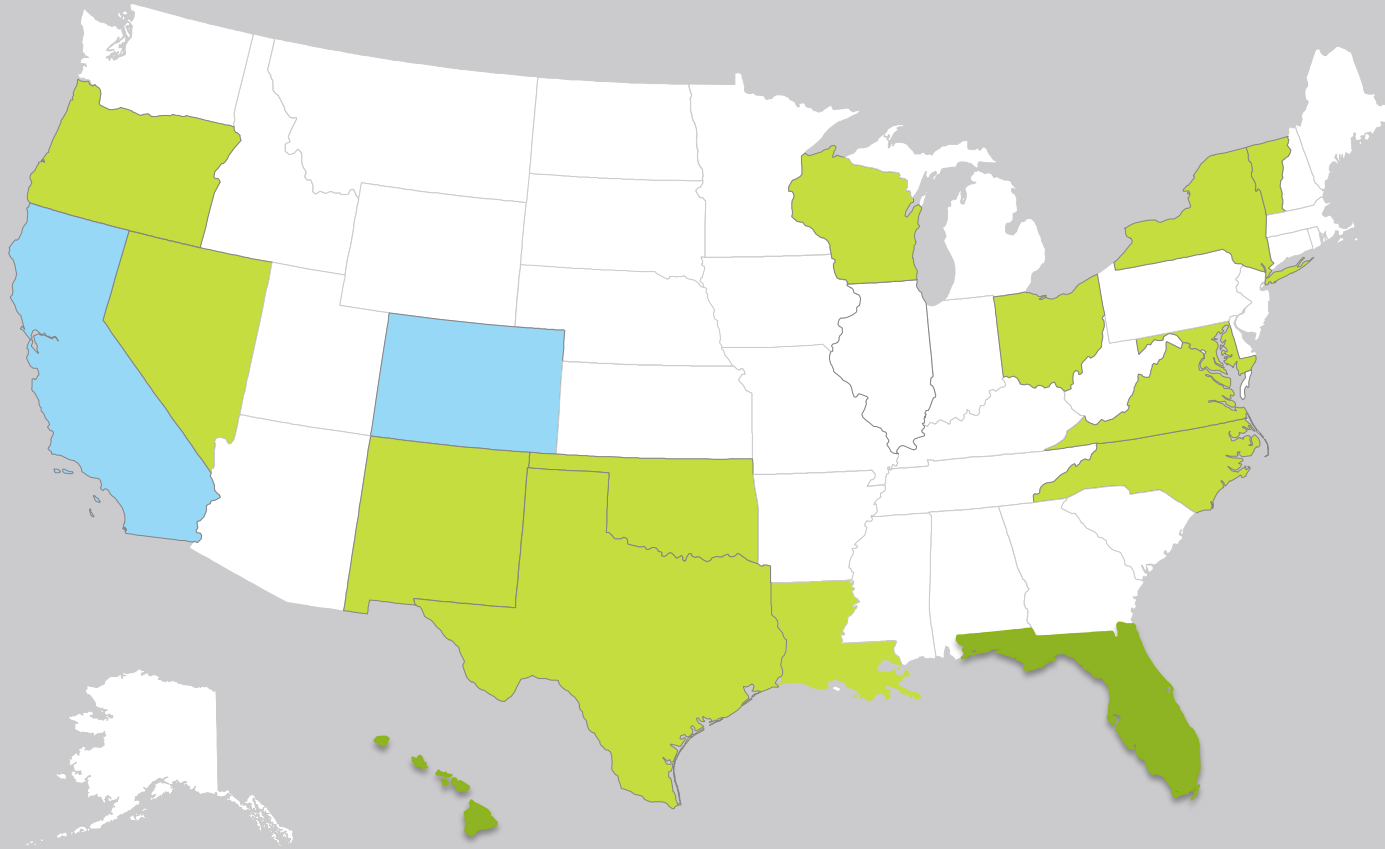
Longer payback projects

Mortgagees prefer performance guarantees

Harnesses markets to scale capital inflow

2009: The PACE Quickens

2 PACE States in Jan 2009 15 PACE States in Dec 2009



Estimated Benefits of PACE Financing for 80K Sq Ft Office Building

- ❖ \$3M in newly-installed building systems with no upfront cost
- ❖ Assessment payments offset by guaranteed savings
 - 25% reduction in building energy consumption
 - \$100,000 in increased cash flow per year
- ❖ ENERGY STAR label improves property marketability
 - 3.5% higher occupancy rates for Energy Star labeled buildings
- ❖ More reliable property from better operational performance
- ❖ Healthier environment for tenants and employees
- ❖ Enhanced sufficiency of existing maintenance reserve funds
- ❖ Potential monetization of energy efficiency credits

PACE Residential/Commercial: Qualifying Projects

❖ HVAC

- Water heating, commercial refrigeration, building controls, etc.

❖ Building Envelope

- Insulation, windows, cool roofing

❖ Lighting

❖ Renewable Energy Generation

- Solar, wind, fuel cell, PHEV charging stations

❖ Water Conservation

- Low flow toilets, shower heads, rain capture, grey water systems

❖ Most programs require cost-effective energy efficiency investments < renewable energy

PACE: How it Works

City or county creates type of land-secured financing district or similar legal mechanism



Property owners voluntarily sign-up for financing and install energy projects



Proceeds from PACE bond provided to property owner to pay for clean energy projects



Property owner repays bond through property tax bill (up to 20 years)



Why PACE financing works...

Secure for investors

- Seniority of the investor position is ahead of other liens/debt
- Default rate on property assessments is very low

Lower cost of capital

- Seniority of lien, low property tax default rate, cure requirements and government subsidies or loan guarantees will enable low interest rates

Transfers with ownership/turnover

- Doesn't limit project simple paybacks to owner's holding period or tenant's occupancy period. Future owners or tenants take on payments & savings

Turns triple net lease into a green lease

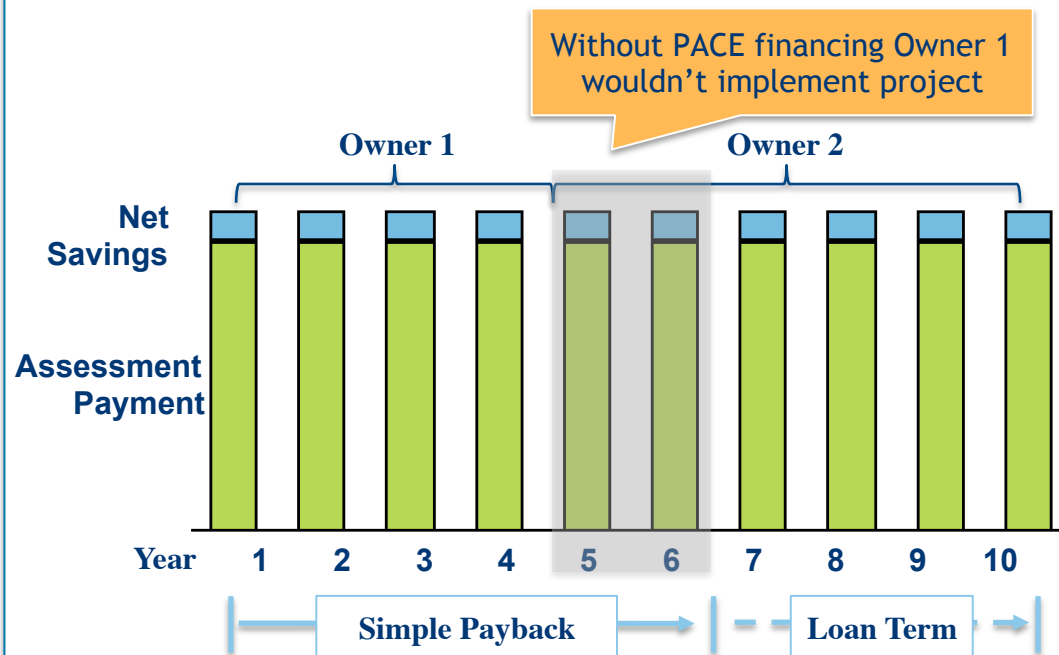
- Tax assessments qualify as an eligible pass thru expense under most triple net leases allowing property owners to pass thru retrofit costs

May be off-balance sheet

- The accountants and FASB must rule on this. Hearing both perspectives: definitely off-balance sheet vs. undeniably on-balance sheet.

PACE Overcomes Problem of 1st Cost

Project Cash Flow Through Tax Lien Financing



PACE model doesn't limit paybacks to owner's holding period. Assessment payments (retrofit costs) and energy savings (net cash flow) accrue to the new owner or tenant.

Key Benefits for Property Owners

Saves money on utility bills, improves property



Not based on personal credit



Repayment can transfer to new owner



PACE Benefits for Communities

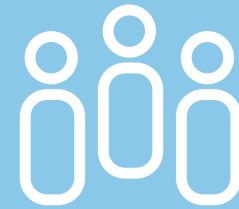
Helps meet
energy and
climate goals



Benefits
residents and
businesses



Promotes
local jobs

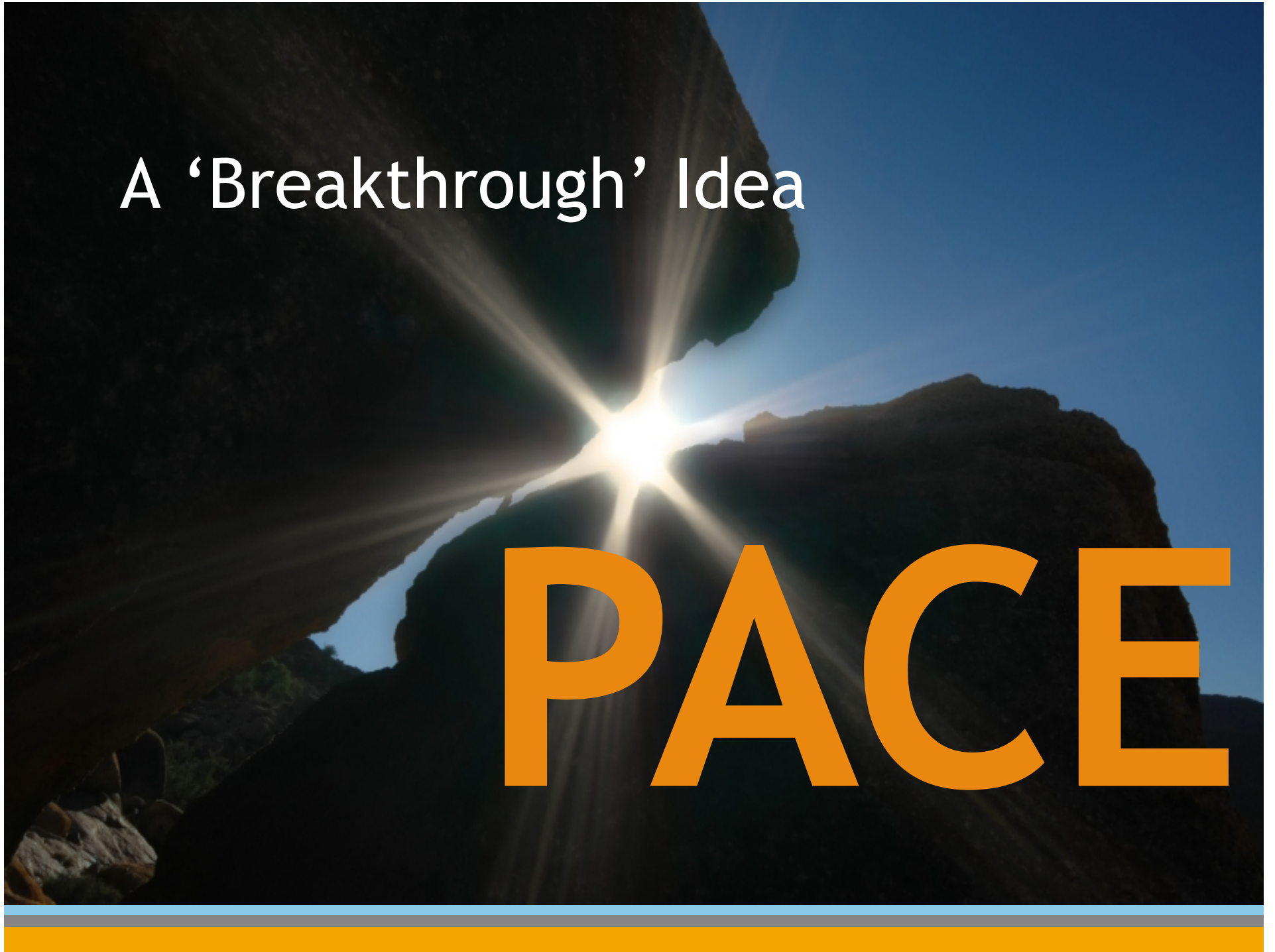


PACE Financing: A Brief History

- ❖ Concept pioneered in Berkeley, CA & Boulder, CO
- ❖ Allows property owners to finance permanently affixed energy improvements (energy efficiency & renewable energy investments) on their home or commercial building
- ❖ Property owners repay the amount financed as a line item – a special assessment – on their property tax bill
 - Special assessments repaid up to 20 years
 - Repayment obligation transfers to the new property owner upon sale

A 'Breakthrough' Idea

PACE



The Barrier: Upfront Cost

Steve's iPhone Bill

\$119/ month

\$1,428/ year

\$28,560/ 20 years



Steve's Utility Bill

\$129/ month

\$1,548/ year

\$30,960/ 20 years



25%



unemployment
U.S. construction
industry, March 2010



35%

carbon emissions
and energy use
in the U.S. comes
from buildings