C-PACE Basics

How Property Accessed Clean Energy Finance is creating public-private partnerships that advance our Clean Energy Economy

March 21, 2017
Odell Brewing Company, Fort Collins
Why New Financing Tools?

**Top Obstacles for Green Building**

- Number of Countries in Which This is One of the Top Three Obstacles
  - Higher Perceived First Costs: 11
  - Lack of Public Awareness: 8
  - Lack of Political Support/Incentives: 6
  - Perception Green Is for High-End Projects Only: 5

**Percentage of Respondents in the Top Countries Who Selected This as a Top Three Obstacle**

- US: 70%
- Colombia: 67%
- Mexico: 54%
- India: 48%
- Colombia: 45%
- Brazil: 41%
- Colombia: 60%
- Poland: 41%
- Brazil: 39%
- Australia: 42%
- UK: 40%
- Singapore: 38%

**Expected Business Benefits of Green Building in the United States**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>New Green Building</th>
<th>Green Retrofit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased Operating Costs Over One Year</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Decreased Operating Costs Over Five Years</td>
<td>28%</td>
<td>21%</td>
</tr>
<tr>
<td>Payback Time for Green Investments (Years)</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

**Current and Expected Use of Green Building Product Categories**

<table>
<thead>
<tr>
<th>Product Categories</th>
<th>2015</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical</td>
<td>54%</td>
<td>63%</td>
</tr>
<tr>
<td>Thermal and Moisture Protection</td>
<td>53%</td>
<td>62%</td>
</tr>
<tr>
<td>Building Automation Systems</td>
<td>46%</td>
<td>59%</td>
</tr>
<tr>
<td>Finishes</td>
<td>45%</td>
<td>59%</td>
</tr>
<tr>
<td>Waste Management</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Mechanical</td>
<td>44%</td>
<td>53%</td>
</tr>
<tr>
<td>Flooring</td>
<td>42%</td>
<td>48%</td>
</tr>
<tr>
<td>Furnishings</td>
<td>28%</td>
<td>36%</td>
</tr>
</tbody>
</table>
C-PACE is an Innovative Financing Model That Provides Commercial, Industrial and Non-Profit Building Owners a Smarter Way to Modernize Their Buildings:

- 100% financing (no out-of-pocket expense)
- Long term (up to 20 years)
- Lower energy costs
- Cash flow positive projects
- No personal guarantees
- Combine with utility & tax incentives
- Payment obligation automatic transfer upon sale (akin to sewer assessment)
C-PACE Program Background

- 795 buildings nationwide
- $292 million in commercial PACE financing

* Courtesy of PACENation
Eligible Property Types

- Office
- Multi-Family
- Non-Profit
- Industrial
- Retail
- Agriculture
- Hotel
Eligible Improvements

- Heating/Ventilation
- Lighting
- Roof
- Water Pumps
- Insulation
- Motors
- Solar Panels
Profile of C-PACE Projects

*C-PACE improvement type breakdown*
(By $ funded)

- Energy Efficiency (49%)
- Renewable energy (37%)
- Mixed (14%)

*C-PACE projects by amount financed*
(By # projects)

- Small, less than $75,000: 30.3%
- Medium, $75,000 - $750,000: 54.8%
- Large, greater than $750,000: 14.8%

* Courtesy of PACENation*
Profile of C-PACE Projects

C-PACE serving broad range of property types & project sizes

- Path of success paved through contractor channel

* Courtesy of PACENation
Counties must opt-in to participate in the C-PACE statewide “District”

County Servicing Fee: to cover semi-annual billing, collections & remittance services up to 1% of PACE assessment amount, included on owners property tax bill
Colorado’s Clean Energy Economy

Jobs and Economic Impact
Colorado’s Clean Energy Economy

- More than 62,000 people are employed in the clean energy sector in Colorado
- 88% of the companies are small businesses and have less than 50 employees
- Larimer County has 2,365 residents employed in clean energy jobs

Source: Environmental Entrepreneurs (E2) January 2017 Clean Jobs Colorado Report
Energy efficiency jobs include building insulation, smart lighting system and appliances, and improving heating and cooling systems.

- 25% of all energy efficiency jobs are in advanced building materials and insulation.
- Energy efficiency projects are the least expensive and most effective way to reduce CO2 emissions.
Colorado Renewable Energy Jobs

* 14,000 renewable energy jobs in Colorado
  * 49.6% of those are in solar
  * 46.1% of those are in wind
  * Fastest growing job in USA: Wind Tech
* Wind installations = 3026 MW (6% of the state’s electricity)
* Solar installations = 926 MW ac
* 15 wind manufacturing facilities in CO
* $700 million in wind power investment in the state
* 5 – 10 million in annual lease payments to landowners from wind projects
Colorado Alternative Fuel Vehicle Jobs

- Alternative fuel vehicles less than 3% of cars in CO
- Expected to jump 12X over next 15 years
- 2,500 jobs in Colorado total
- Technologies include hybrids, natural gas vehicles, plug-in electrics, and fuel cell cars
Other Clean Energy-Related Jobs in Colorado

* Clean Fuels
  * Main technologies are corn ethanol and non-woody biomass
  * 3,085 clean energy workers total
  * Woody biomass management (pine beetle infestation, e.g.) were 700 jobs

* Smart Grid & Storage
  * 1,274 employees (59%) work with smart grid technologies
  * 904 employees (42%) work in advanced storage technologies
  * Volkswagen settlement expected to boost EV infrastructure