GOVERNOR'S OFFICE OF
ENERGY DEVELOPMENT
Advancing Utah's Energy Future

UTAH C-PACE

FINANCING CLEAN ENERGY

What is C-PACE?

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- A new way to finance energy improvements on new or existing commercial buildings
- How the financing works:
  - A voluntary C-PACE assessment and lien is placed on the real property
  - Lien is assigned to the lender
  - Lender extends private loans "the funds" to the property owner to finance project
- C-PACE Assessment features:
  - Voluntary
  - Long term (up to 30 years)
  - No personal guarantees
  - Assessment doesn't accelerate
  - Assessment can transfer if the property is sold

What is C-PACE?

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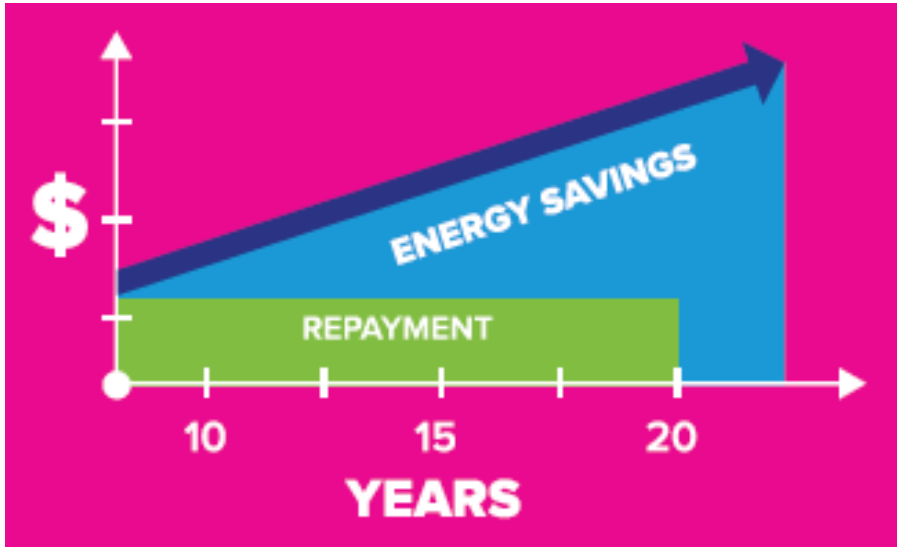
- For existing buildings – C-PACE offers $0 down, 100% private financing for commercial buildings to fund energy improvements
- For new construction – C-PACE can fill gaps in the capital stack and allow owners to upgrade designs



Goal: Energy savings > the C-PACE payments = Positive cash flow

What's eligible?

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- Eligible properties:
  - Hotel
  - Retail
  - Office
  - Industrial
  - Multifamily (5+ rented units)
  - Industrial
  - Healthcare
  - Nonprofit
- Eligible improvements*:
  - Energy efficiency and water conservation
  - Renewable energy
  - Battery storage
  - EV charging
  - Parking automation
  - Seismic upgrades
  - Vertical transport devices

*Soft costs and related expenses can be included in C-PACE financing

C-PACE 2.0

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- 2017 legislation (S.B. 273) updated how C-PACE can be financed, administered, and the types of eligible improvements
- Financing – can be secured through an assessment bond or an assignable lien

	Assessment Bond	**Assignable Lien**
Issuer	City Council	City Executive / Administrator or C-PACE District
Fee	Starting at $15K (approximately 3% of financed amount)	3% of financed amount, not to exceed $90K (for C-PACE District)
Factors	• Reluctance to issue bond for commercial property	• Preferred financial instrument

The City's Role

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3 options:

1. Voluntarily opt in to the C-PACE District (using assignable lien)

- City Council passes resolution and executes participation agreement
- C-PACE District manages education, outreach, project development from start to close, at no cost to the City
- No requirement on City to complete projects

2. Administer Locally (using assignable lien)

- Develop and vet projects
- Decide terms
- The City's executive or administrator places voluntary C-PACE assessment and assignable lien
- Collect repayments or have capital provider collect repayments

3. Administer Locally (using assessment bond)

- Develop and vet projects
- Decide terms
- City Council places voluntary C-PACE assessment and issues assessment bond for project costs
- Collect repayments or have capital provider collect repayments

Responsibilities

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1. OED/C-PACE District responsibilities:
   a. Develop a Program Guide
   b. May serve as facilitator for securing third-party financing
   c. Receive and review applications submitted by owners, and approve or disapprove such applications in accordance with Statute
   d. Facilitate Assessment and Financing Agreement between owner and third-party financing
   e. Disclose to owner any costs and risks associated with participating
   f. Establish assessments
   g. File assessment with applicable county clerk or recorder
2. City responsibilities:
   a. Good faith effort to assist in marketing efforts and outreach with the local business community
3. Council may adopt a resolution de-authorizing OED from administering the C-PACE District within its jurisdiction
4. Does not obligate the city to completing projects, C-PACE is a voluntary program

Current C-PACE District

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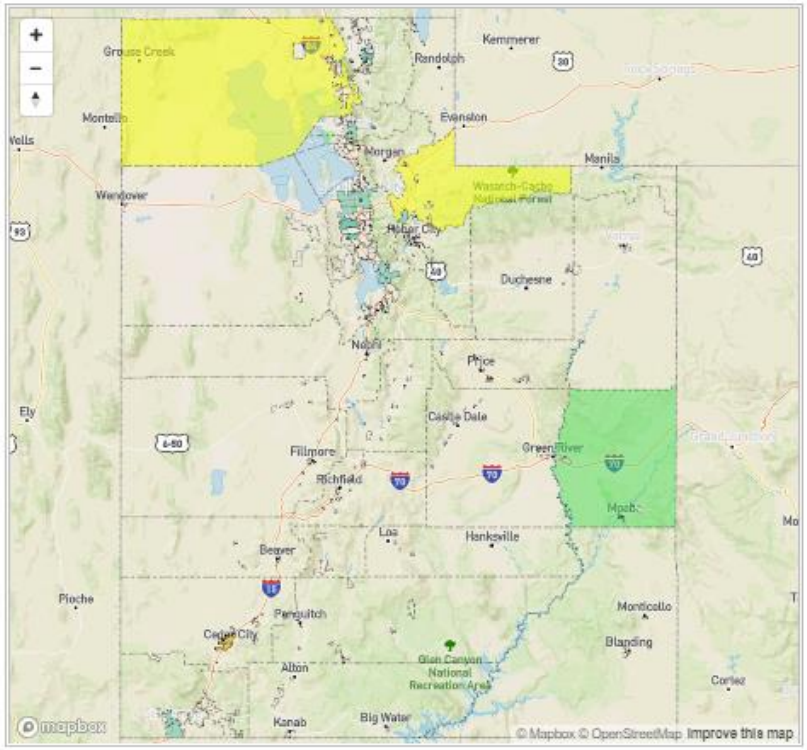
PARTICIPATING AREAS



PARTICIPATING AREAS[1]:

COUNTIES:
- Grand County

CITIES
- Logan
- Millville
- Moab
- Ogden
- Orem
- Park City
- Provo
- Riverdale
- Riverton
- Salt Lake City
- St. George
- West Jordan
- West Valley City

IN-DISCUSSION AREAS[2]:

COUNTIES:
- Box Elder County
- Summit County

CITIES
- Cedar City

[1] Participating Areas have passed the required resolution and fully-executed the C-PACE District participation agreement.

[2] If you have a potential C-PACE project outside a Participating Area or are a city or county that wants to join the C-PACE District, please contact us for more information.

City Engagement

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1. Project engagement
   a. OED must maintain confidentiality on all projects
   b. Will contact city (if requested) on any pending projects
   c. Can release information to city, with property owner or contractor consent
2. Education and outreach
   a. C-PACE District offers monthly training
   b. Local city training available upon request

C-PACE District Services

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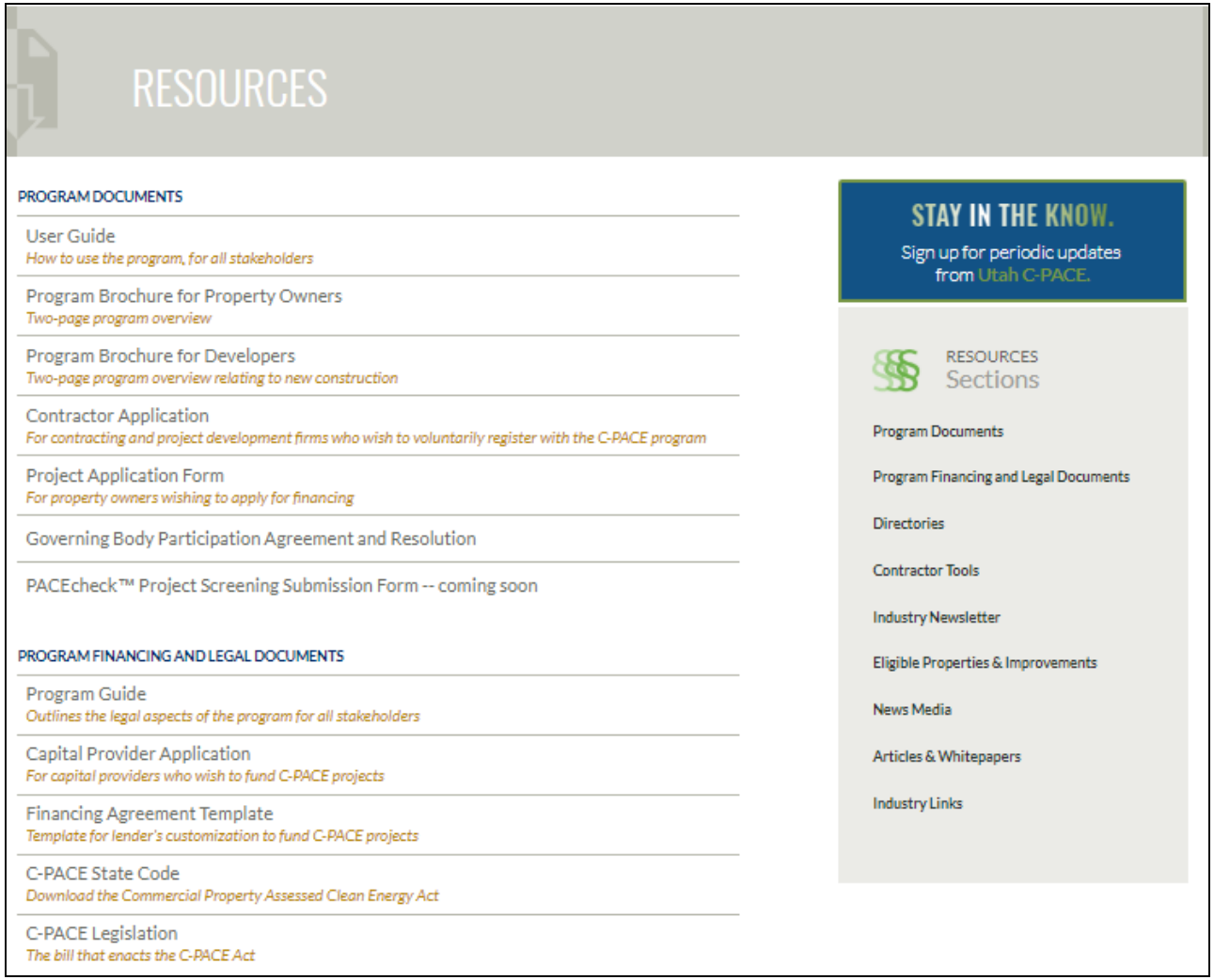

RESOURCES

PROGRAM DOCUMENTS

- User Guide
  How to use the program, for all stakeholders
- Program Brochure for Property Owners
  Two-page program overview
- Program Brochure for Developers
  Two-page program overview relating to new construction
- Contractor Application
  For contracting and project development firms who wish to voluntarily register with the C-PACE program
- Project Application Form
  For property owners wishing to apply for financing
- Governing Body Participation Agreement and Resolution
- PACEcheck™ Project Screening Submission Form -- coming soon

PROGRAM FINANCING AND LEGAL DOCUMENTS

- Program Guide
  Outlines the legal aspects of the program for all stakeholders
- Capital Provider Application
  For capital providers who wish to fund C-PACE projects
- Financing Agreement Template
  Template for lender's customization to fund C-PACE projects
- C-PACE State Code
  Download the Commercial Property Assessed Clean Energy Act
- C-PACE Legislation
  The bill that enacts the C-PACE Act

STAY IN THE KNOW.
Sign up for periodic updates from Utah C-PACE.

RESOURCES
Sections

- Program Documents
- Program Financing and Legal Documents
- Directories
- Contractor Tools
- Industry Newsletter
- Eligible Properties & Improvements
- News Media
- Articles & Whitepapers
- Industry Links

Utahcpace.com

C-PACE District Services

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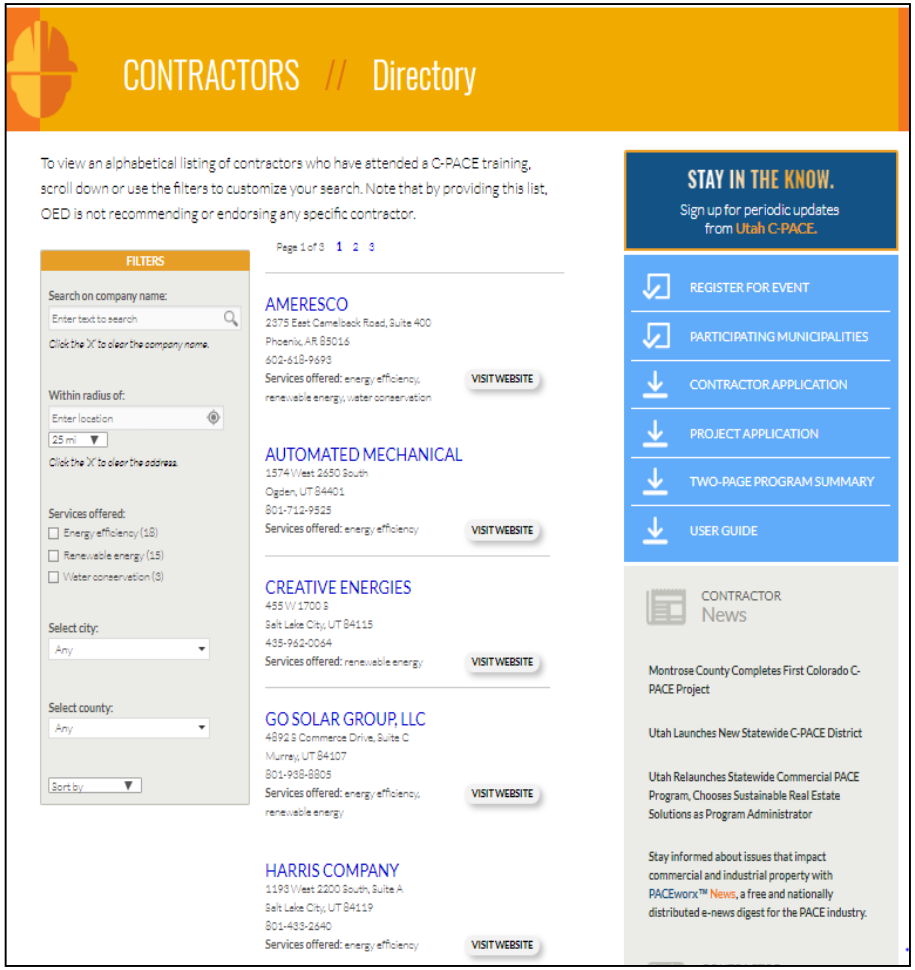

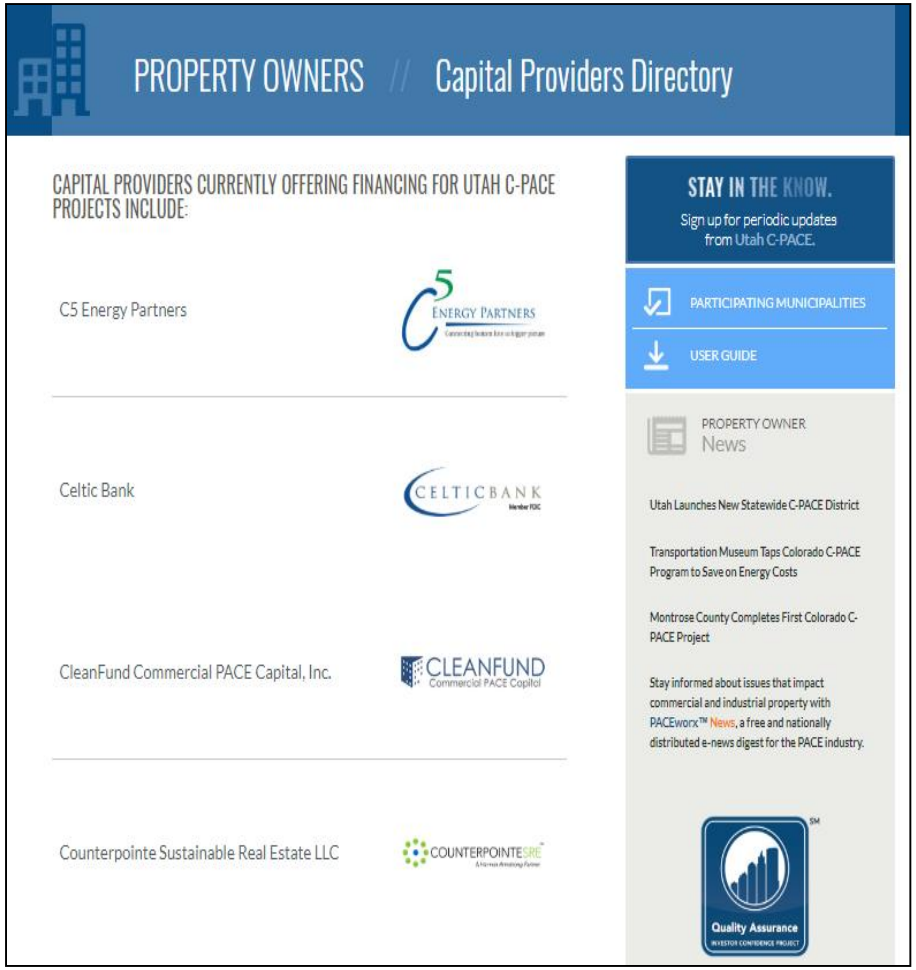

Utahcpace.com

Processing Projects

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1. Submit property address for pre-qualification – PACEcheck Report
   a. Current on mortgage and property tax payments
   b. No involuntary liens or recent bankruptcy
2. Select contractor for project development – Contractor Directory
3. Download and submit project application – PACEworx Report
   a. Translates energy data to key project financials
   b. Proven to meet underwriting requirements for building owner, mortgage holder, and capital provider
4. OED executes utility agreement
5. Obtain mortgage holder consent
6. Select capital provider to fund project – Capital Provider Directory
7. Execute project development agreement with contractor
8. Execute financing agreement with capital provider
9. Record assessment and lien
10. Complete project

Case Studies

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Title	Location	Project Type	Financing
Hunt Electric Headquarters	West Valley City, UT	Renewable energy solar array, EV charging, battery storage	$100,500 for 20 years at 6.5%
Ogilvie Properties Office Building	Golden, CO	Energy efficiency upgrades	$470,000 for 20 years
Mayfly Outdoors Headquarters (new)	Montrose, CO	High efficiency, above code construction	$994,500 for 20 years
Historic Restoration	Florence, CO	Energy efficiency upgrades and renewable energy	$616,844 for 19 years
Forney Museum	Denver, CO	Energy efficiency upgrades	$63,073 for 10 years

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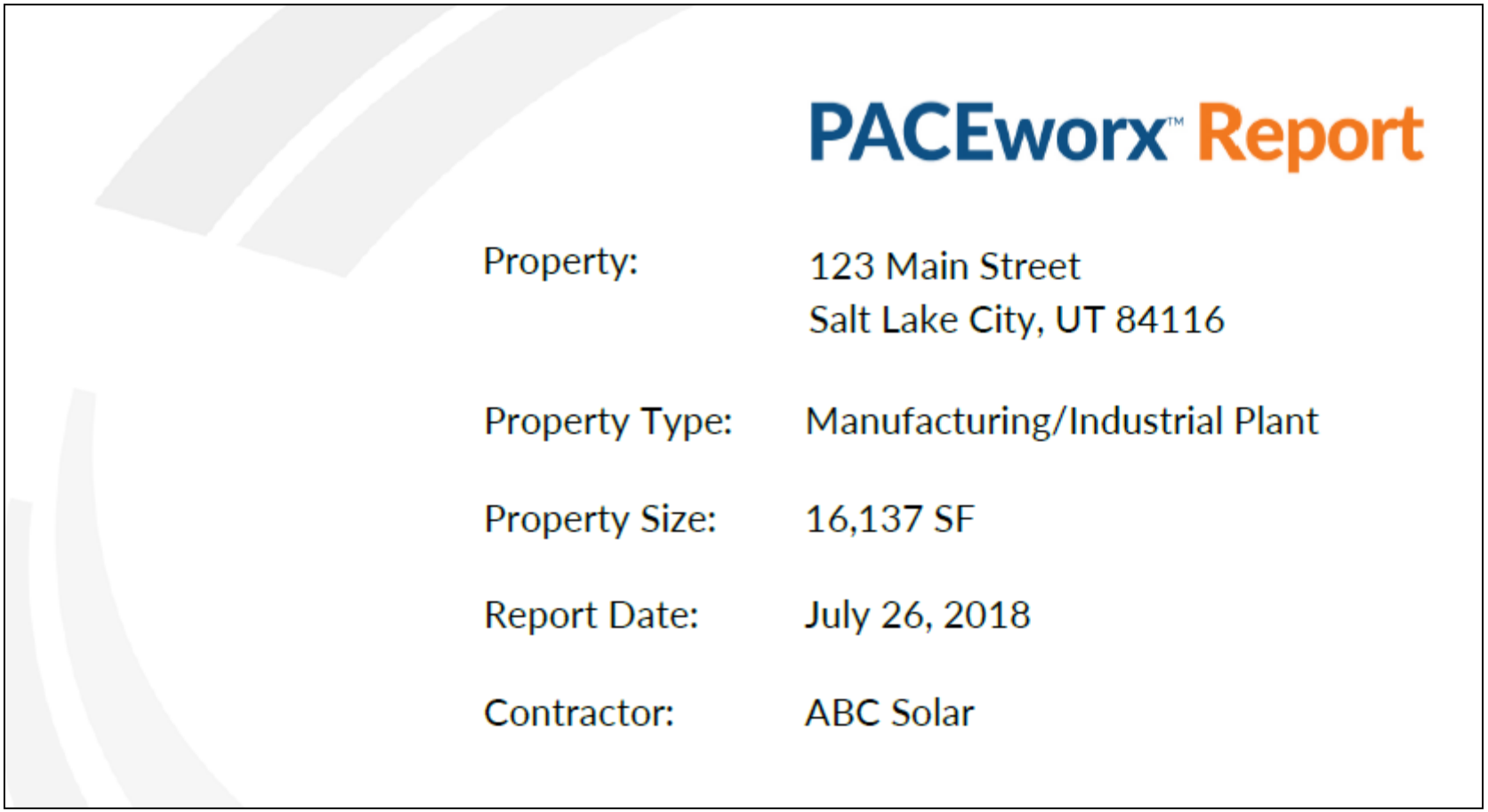
Thank you!

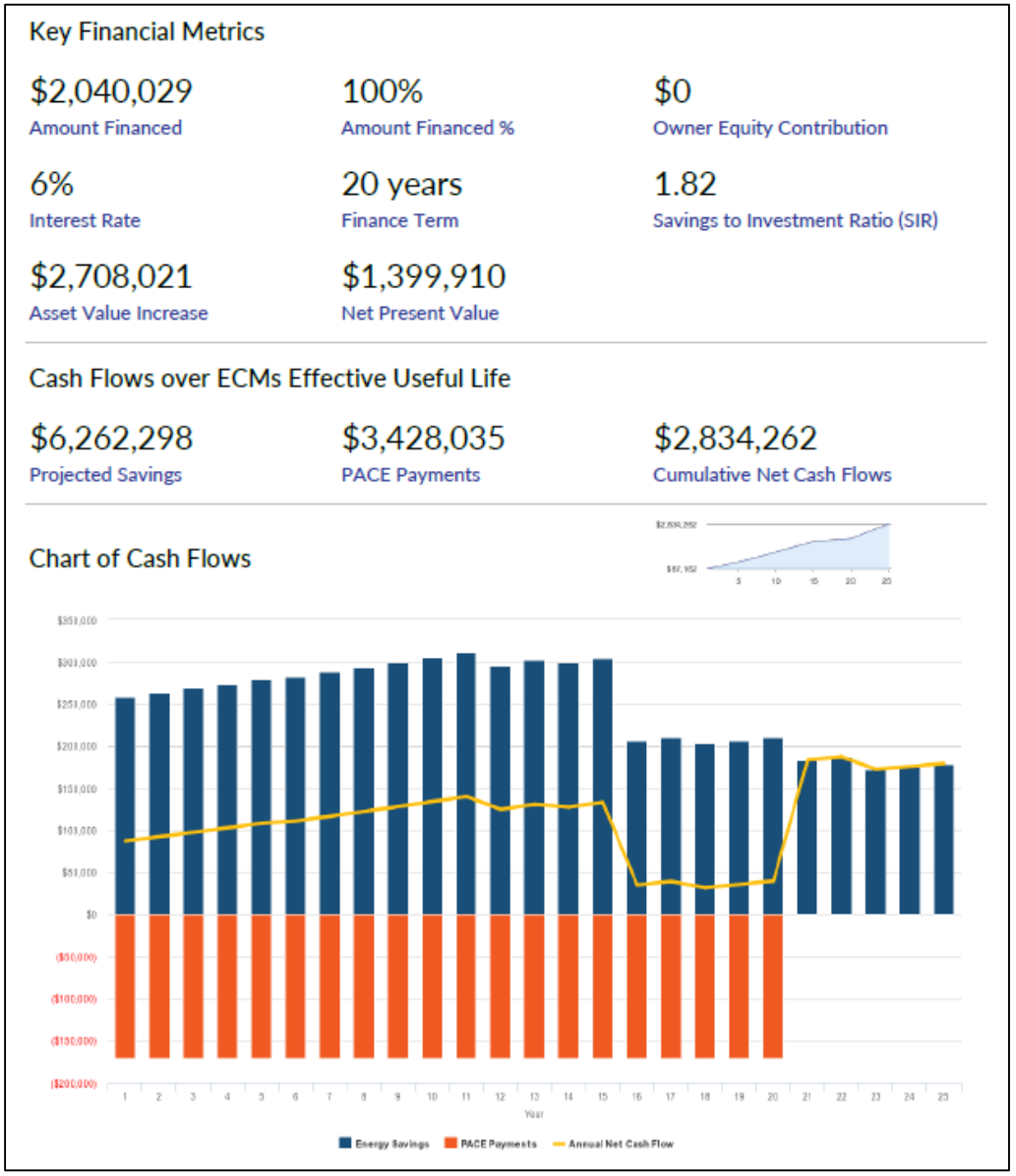
Shawna Cuan
scuan@utah.gov
385-235-4580

PACEworx™ Report



Financial Summary

- **Amount financed**
- **Interest rate**
- **Term**
- **Est value increase**
- **Cash flows**
  - Projected energy savings
  - PACE Payments
- **Chart of cash flows**
  - Yellow = net ann cf



Scenario Summary

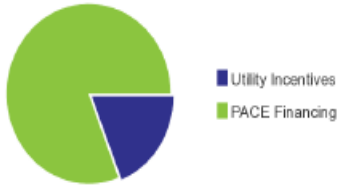
- **Project Cost**
  - Less Incentives
- **Net Installed Cost**
  - Less Equity Contribution
- **Amount Financed**
- **Incentives**
  - Tax Benefits, Credits & Grants
- **Total Incentives**
- **Net Installed Cost**
  - Minus All Incentives
- **First Year Savings**
  - Total EUI
  - Total Consumption

100% Financed Scenario: 20-Year Term at 6% Interest Rate

Project Cost

Gross Installed Cost	$2,462,000	100%
One-Time Utility Incentives	($469,317)	19%
Net Installed Cost	$1,992,683	
Owner Equity Contribution	($0)	0%
Project Amount Financed	$1,992,683	81%

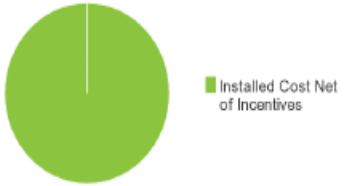
Project Funding



Incentives: Tax Benefits, Credits & Grants

Net Installed Cost	$1,992,683	100%
Federal Investment Tax Credit	($0)	
MACRS and Bonus Depreciation	($0)	
Renewable Energy Credit	($0)	
Grants	($0)	
Total Incentives	($0)	0%
Installed Cost Net of Incentives	$1,992,683	100%

Installed Cost Net of Incentives



First Year Consumption and Savings (Weather Normalized)

	Baseline Consumption	Projected Consumption	Projected Savings	Units	Unit Cost	Projected % Savings
Total EUI	132.2	45.0	87.2	kBtu/SF		66.0%
Total Consumption	12,563	4,277	8,286	MMBtu/yr		66.0%
Electric Consumption	2,193,100	826,849	1,366,251	kWh/yr	$0.16/kWh	62.3%
Electric Demand			321.0	kW		
Fuels Consumption	50,797	14,556	36,240	therm/yr	$1.49/therm	71.3%

Weather normalized baseline consumption values are from the 12 months baseline period June 2015 to May 2016. Projected first year weather normalized consumption values are calculated by subtracting the sum of the recommended ECMs projected savings from the baseline consumption during the baseline period. Projected energy savings values are based on methodology outlined in the Investor Confidence Project Energy Performance Protocol.

Scenario Summary cont.

- **Project Impacts**
  - Consumption Savings
  - Jobs Created
- **Project Schedule**
  - Start & Completion
- **PV Analysis**
  - Discount Rate
  - PV ECM Savings over EUL
  - PV PACE Payments
  - SIR (PV)

Project Impacts

Consumption Savings		Job-Years Created[2]	
First Year	8,286 MMBtu	Direct	13.8
Total[3]	158,389 MMBtu	Indirect	17.9
		Total	31.7

[1] CO_2e emissions reduction values are based on methodology outlined in the ASTM Building Energy Performance Assessment Standard E2797-15.

[2] Job-years created values are based on methodology outlined in the Navigant Consulting Inc., Connecticut Department of Economic and Community Development, and Connecticut Green Bank, Clean Energy Jobs Study, June 2016.

[3] Total values are calculated based on the combined energy savings over each ECMs EUL.

Project Schedule

Projected Start Date	April 01, 2014
Projected Completion Date	October 31, 2015

SIR Present Value[4] Analysis

Present Value Discount Rate	6.00%
Present Value of Projected Savings over ECMs EUL	$3,365,875
Present Value of PACE Payments	$1,965,965
Present Value-based SIR	1.71

[4] Present Value (PV) is the current worth of a future sum of money or stream of cash flows given a specified rate of return. Future cash flows are discounted at the discount rate, and the higher the discount rate, the lower the present value of the future cash flows.

Projected Cash Flows

- **Annual Projections**
- **Project Savings**
  - Life of ECM's
- **PACE Payments**
- **Net Annual CFs**
  - Savings less PACE
- **Cumulative CF's 90% Confidence Level**
  - Based on Monte Carlo simulation

The table below displays the projected annual, cumulative and 90% confidence level cash flows over the ECMs effective useful life (EUL) as defined in the ECM Recommendations Financial Summary.

			Net Cash Flows		
Year	Project Savings	PACE Payments	Annual	Cumulative	90% Confidence Level
Owner Equity Contribution			($0)	($0)	($0)
1	$258,563	$171,402	$87,162	$87,162	$72,487
2	$263,657	$171,402	$92,255	$179,417	$77,313
3	$268,851	$171,402	$97,449	$276,866	$82,234
4	$274,148	$171,402	$102,746	$379,612	$87,252
5	$279,548	$171,402	$108,146	$487,759	$92,369
6	$282,409	$171,402	$111,008	$598,766	$95,080
7	$287,973	$171,402	$116,571	$715,337	$100,350
8	$293,646	$171,402	$122,244	$837,582	$105,725
9	$299,431	$171,402	$128,029	$965,611	$111,206
10	$305,330	$171,402	$133,928	$1,099,538	$116,795
11	$311,345	$171,402	$139,943	$1,239,481	$122,493
12	$296,229	$171,402	$124,827	$1,364,309	$108,173
13	$302,065	$171,402	$130,663	$1,494,972	$113,702
14	$298,730	$171,402	$127,328	$1,622,300	$110,542
15	$304,614	$171,402	$133,213	$1,755,512	$116,117
16	$206,260	$171,402	$34,858	$1,790,371	$22,934
17	$210,323	$171,402	$38,922	$1,829,292	$26,783
18	$202,872	$171,402	$31,470	$1,860,763	$19,724
19	$206,869	$171,402	$35,467	$1,896,229	$23,510
20	$210,944	$171,402	$39,542	$1,935,772	$27,371
Subtotals (over finance term)	$5,363,807	$3,428,035	$1,935,772		$1,632,161
21	$183,701	$0	$183,701	$2,119,473	$174,043
22	$187,320	$0	$187,320	$2,306,793	$177,471
23	$172,405	$0	$172,405	$2,479,197	$163,340
24	$175,801	$0	$175,801	$2,654,998	$166,558
25	$179,264	$0	$179,264	$2,834,262	$169,839
Totals	**$6,262,298**	**$3,428,035**	**$2,834,262**		**$2,483,412**

Projections include ECM Savings Over EUL as defined in the ECM Recommendations Financial Summary. ECM savings are assumed to persist over the term of each ECMs EUL and terminate at each ECMs EUL end-date. Projections also include annual utility price escalation factors of 3% for electricity and 3% for fuels, and an annual savings degradation factor of 1%. The Confidence Level Cash Flows are derived from a Monte Carlo simulation based on assumptions associated with this project's ECMs. Based on these assumptions, there is a 90% likelihood that the Projected Cash Flows will be as good as or better than those displayed in the 90% Confidence Level column.

Projected Payments

- **Data Shown**
  - Amount Financed
  - Program Admin Fee
  - Total Amount Financed
  - Interest Rate
  - Type of Installments
- **Over Term of Lien**
  - Payment Date
  - Amount
  - Principal & Interest Paid
  - Remaining Balance
- **Two Pages (7 & 8)**

The table below displays projected payment dates and amounts based on the estimated project completion date of October 31, 2015. These values will be finalized upon completion of project construction.

Project Amount Financed	$1,992,683	Interest Rate	6.0 %
Program Administration Fee	$47,346	Term	20 Years
		Number of Installments	40 Semi-Annual Payments
Total Amount Financed	$2,040,029	Payment Calculation	Beginning of period

Installment #	Payment Date	Payment	Principal Paid	Interest Paid	Remaining Balance
1	11/1/2015	$85,701	$85,345	$356	$1,954,684
2	5/1/2016	$85,701	$27,060	$58,641	$1,927,624
3	11/1/2016	$85,701	$27,872	$57,829	$1,899,752
4	5/1/2017	$85,701	$28,708	$56,993	$1,871,043
5	11/1/2017	$85,701	$29,570	$56,131	$1,841,474
6	5/1/2018	$85,701	$30,457	$55,244	$1,811,017
7	11/1/2018	$85,701	$31,370	$54,331	$1,779,647
8	5/1/2019	$85,701	$32,311	$53,389	$1,747,335
9	11/1/2019	$85,701	$33,281	$52,420	$1,714,054
10	5/1/2020	$85,701	$34,279	$51,422	$1,679,775
11	11/1/2020	$85,701	$35,308	$50,393	$1,644,468
12	5/1/2021	$85,701	$36,367	$49,334	$1,608,101
13	11/1/2021	$85,701	$37,458	$48,243	$1,570,643
14	5/1/2022	$85,701	$38,582	$47,119	$1,532,061
15	11/1/2022	$85,701	$39,739	$45,962	$1,492,322
16	5/1/2023	$85,701	$40,931	$44,770	$1,451,391
17	11/1/2023	$85,701	$42,159	$43,542	$1,409,232
18	5/1/2024	$85,701	$43,424	$42,277	$1,365,808
19	11/1/2024	$85,701	$44,727	$40,974	$1,321,081
20	5/1/2025	$85,701	$46,068	$39,632	$1,275,013
21	11/1/2025	$85,701	$47,451	$38,250	$1,227,562
22	5/1/2026	$85,701	$48,874	$36,827	$1,178,688
23	11/1/2026	$85,701	$50,340	$35,361	$1,128,348
24	5/1/2027	$85,701	$51,850	$33,850	$1,076,498
25	11/1/2027	$85,701	$53,406	$32,295	$1,023,092
26	5/1/2028	$85,701	$55,008	$30,693	$968,083
27	11/1/2028	$85,701	$56,658	$29,043	$911,425
28	5/1/2029	$85,701	$58,358	$27,343	$853,067
29	11/1/2029	$85,701	$60,109	$25,592	$792,958
30	5/1/2030	$85,701	$61,912	$23,789	$731,046

Key Assumptions

- **Building**
  - Assumed Tax & Cap Rates
- **Project**
  - Includes Jobs Estimate
- **Savings Factors**
  - Escalation & Degradation
- **Methodologies Used**
  - Consumption – Bill-based
  - Savings & Costs Uncertainty Levels (+/- 10%)
- **Financing Specifics**
  - Amount Financed
  - Interest Rate
  - Discount Rate for NPV Calcs
  - % Amount Advanced

Building

Income Tax Rate	30.0 %
Assumed Capitalization (CAP) Rate[1]	9.25 % (for Asset Value calculation)

[1] The Asset Value Increase calculation assumes PACE payments are treated as loan payments that do not impact the building's net operating income.

Project

Fiscal Year Start Date (month day)	January 01
Do Incentives Go To Building Owner?	Yes
Percent Local Jobs (%)	100 % (in-state labor allocation)

Factors Used to Calculate Projected Savings

Annual Electricity Price Escalation	3.0 %
Annual Fuels Price Escalation	3.0 %
Annual Savings Degradation	1.0 %

Methodologies Used to Calculate Savings Projections

Energy Consumption Baseline Data	Conventional (Utility bill-based, no adjustments)
Savings Projections Uncertainty Level	± 10 % (ASHRAE Level II energy audit with modeling)
Costs Estimates Uncertainty Level	± 10 % (Firm quotations for primary ECMs)

Financing

Percent Financed	100 %
PACE Financing Interest Rate	6.00 %
Number of Days per Year	360 (for Interest calculation)
Term	20 Years
Payment Calculation Method	Beginning of period
First Disbursement Date	Apr 01, 2014
Final Disbursement Date	Oct 31, 2015
Repayment Start Date	Nov 01, 2015
Discount Rate (for NPV calculation)	6.0 %
Program Administration Fee (%)	2.3760 % of project finance amount
Green Bank Advance Rate (%)	100 % (Green Bank funds advanced as % of amt financed)

ECM Financial Summary

- **EUL – Effective Useful Life**
- **Gross Costs**
  - Gross Installed Cost
- **Utility Incentives**
  - One Time Incentives
- **Net Costs**
- **1st Year Savings**
  - For Each ECM
- **Savings over EUL**
  - Individual ECMs
- **Savings over Term**
  - All ECMs
- **Simple Payback**

ECM Name	Effective Useful Life (EUL) (Years)	Gross Installed Costs	One-Time Utility Incentives	Net Costs	First Year Savings	Savings Over EUL	Savings Over Finance Term	Simple Payback Term (Years)
Pumps: High Efficiency (associated w/Chiller, HW): Replacement w/VFDs: ID: 14.1.2: Convert to VAV	20.0	$14,000	($5,600)	$8,400	$11,632	$281,784	$281,784	0.72
Maintenance Practices: Improvements to Increase EE: Cleaning: ID:10.1.1: Heat Ex.	5.0	$4,000	($800)	$3,200	$2,400	$12,482	$12,482	1.33
HVAC-Heating: Boiler Controls: Uncategorized: ID: 7.1.3: Pumps	15.0	$15,000	($6,000)	$9,000	$3,748	$64,675	$64,675	2.40
Pumps: High Efficiency (associated w/Chiller, HW): Replacement w/VFDs: ID: 14.1.2: address HW pumps	20.0	$14,000	($5,600)	$8,400	$2,400	$58,140	$58,140	3.50
Pumps: High Efficiency (associated w/Chiller, HW): Add VFD and Controls: ID: 14.1.1: Variable Primary Flow	25.0	$187,000	($62,436)	$124,564	$31,218	$996,100	$756,254	3.99
HVAC-Air Conditioning: Cooling Towers: Uncategorized: ID:6.3.2:	13.0	$45,000	($18,000)	$27,000	$3,991	$58,481	$58,481	6.77
HVAC-Ventilation: Air Handling Unit: w/Damper Modification: ID:8.1.4:	20.0	$80,000	($14,471)	$65,529	$7,223	$174,977	$174,977	9.07
Building Envelope: Windows: Replacement: Low-E: ID: 1.13.3.2:	25.0	$1,000,000	($251,462)	$748,538	$81,024	$2,585,304	$1,962,800	9.24
Pumps: High Efficiency (associated w/Chiller, HW): Add VFD and Controls: ID: 14.1.1	13.0	$57,000	($6,429)	$50,571	$3,215	$47,110	$47,110	15.73
HVAC-Air Conditioning: Cooling Towers: Replacement w/VFDs: ID:6.3.1:	22.0	$222,000	($24,976)	$197,024	$12,113	$329,576	$293,436	16.27
Controls: HVAC Energy Management System (EMS): Direct Digital Control: ID:4.4.1	11.0	$354,000	($34,291)	$319,709	$17,145	$208,314	$208,314	18.65
HVAC-Air Conditioning: Chillers: Replacement w/ VFDs and High Efficiency Motors: ID:6.1.6:	17.0	$470,000	($16,645)	$453,355	$8,322	$166,126	$166,126	54.48
ECM Related Costs / Savings Name								
ECM Related Costs/Savings: Savings: Utility Incentive: Comprehensive Bonus (multi-ECMs): ID:5.2.8.1:	1.0	$0	($22,607)	($22,607)	$1	$0	$0	N/A
ECM Related Costs/Savings: Costs: Data Center Removal: ID:5.1.5	15.0	$0	-	$0	$74,133	$1,279,228	$1,279,228	N/A
Project Totals		**$2,462,000**	**($469,317)**	**$1,992,683**	**$258,563**	**$6,262,298**	**$5,363,807**	
Weighted EUL	19.9	Cost-weighted avg. (yrs)						
	21.6	Savings-weighted avg. (yrs)						

ECM Savings Over EUL are weather normalized and calculated based on each ECMs EUL. These savings are assumed to persist over the term of each ECMs EUL and terminate at each ECMs EUL end-date. ECM Savings Over EUL include annual utility price escalation factors of 3% for electricity and 3% for fuels, as well as an annual savings degradation factor of 1%.

ECM Savings Summary

- **Details of each ECM**
- **EUL**
  - For Each ECM
- **Year 1 Savings**
  - KWhrs & Therms
- **Savings over EUL**
  - Over Each ECM's Life
- **Savings over Term**
  - Over Finance Term
- **Projected % Savings Over Baseline**
  - For Each ECM

ECM Name	Effective Useful Life (EUL) (Years)		First Year Unit Savings	Unit Savings Over EUL	Unit Savings Over Finance Term	Projected % Savings Over Baseline
ECM Related Costs/Savings: Costs: Data Center Removal: ID:5.1.5	15.0	Electric: Fuels:	506,556 kWh/yr (1,270) therms/yr	7,121,346 kWh (17,851) therms	7,121,346 kWh (17,851) therms	23.1% (2.5)%
Pumps: High Efficiency (associated w/Chiller, HW): Replacement w/VFDs: ID: 14.1.2: Convert to VAV	20.0	Electric:	77,545 kWh/yr	1,418,780 kWh	1,418,780 kWh	3.5%
Maintenance Practices: Improvements to Increase EE: Cleaning: ID:10.1.1: Heat Ex.	5.0	Electric:	16,000 kWh/yr	78,710 kWh	78,710 kWh	0.7%
HVAC-Heating: Boiler Controls: Uncategorized: ID: 7.1.3: Pumps	15.0	Electric: Fuels:	-3,084 kWh/yr 2,807 therms/yr	-43,356 kWh 39,462 therms	-43,356 kWh 39,462 therms	(0.1)% 5.5%
Pumps: High Efficiency (associated w/Chiller, HW): Replacement w/VFDs: ID: 14.1.2: address HW pumps	20.0	Electric:	21,431 kWh/yr	392,106 kWh	392,106 kWh	1.0%
Pumps: High Efficiency (associated w/Chiller, HW): Add VFD and Controls: ID: 14.1.1: Variable Primary Flow	25.0	Electric: Demand:	208,121 kWh/yr 11 kW	4,646,779 kWh	3,807,826 kWh	9.5%
HVAC-Air Conditioning: Cooling Towers: Uncategorized: ID:6.3.2:	13.0	Electric: Demand:	26,605 kWh/yr 58 kW	327,320 kWh	327,320 kWh	1.2%
HVAC-Ventilation: Air Handling Unit: w/Damper Modification: ID:8.1.4:	20.0	Electric: Fuels: Demand:	47,350 kWh/yr 63 therms/yr 31 kW	866,326 kWh 1,153 therms	866,326 kWh 1,153 therms	2.2% 0.1%
Building Envelope: Windows: Replacement: Low-E: ID: 1.13.3.2:	25.0	Electric: Fuels: Demand:	193,755 kWh/yr 34,640 therms/yr 167 kW	4,326,025 kWh 773,418 therms	3,544,982 kWh 633,781 therms	8.8% 68.2%
Pumps: High Efficiency (associated w/Chiller, HW): Add VFD and Controls: ID: 14.1.1	13.0	Electric:	21,431 kWh/yr	263,665 kWh	263,665 kWh	1.0%
HVAC-Air Conditioning: Cooling Towers: Replacement w/VFDs: ID:6.3.1:	22.0	Electric: Demand:	80,756 kWh/yr 31 kW	1,609,700 kWh	1,477,529 kWh	3.7%
Controls: HVAC Energy Management System (EMS): Direct Digital Control: ID:4.4.1	11.0	Electric: Demand:	114,302 kWh/yr 26 kW	1,201,554 kWh	1,201,554 kWh	5.2%
HVAC-Air Conditioning: Chillers: Replacement w/ VFDs and High Efficiency Motors: ID:6.1.6:	17.0	Electric: Demand:	55,483 kWh/yr -3 kW	875,465 kWh	875,465 kWh	2.5%
Project Subtotals		Electric: Fuels: Demand:	1,366,251 kWh/yr 3,624 MMBtu/yr 321.0 kW	23,084,420 kWh 79,618 MMBtu	21,332,253 kWh 65,654 MMBtu	62.3% 71.3%
Project Totals			**8,286 MMBtu/yr**	**158,389 MMBtu**	**138,446 MMBtu**	**66.0%**

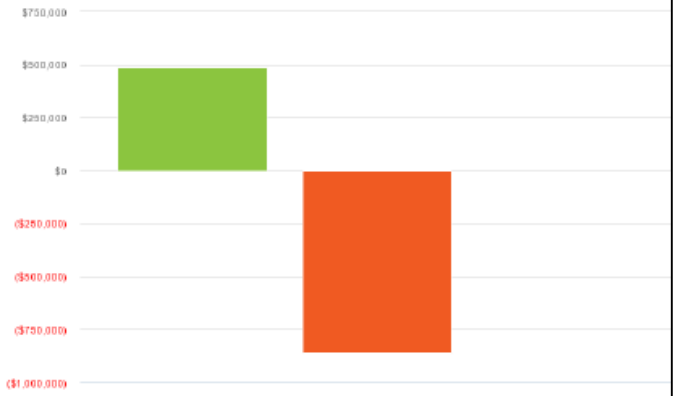
Unit Savings projections are weather normalized and include an annual savings degradation factor of 1%. Projected % Savings for each ECM is calculated as the ratio of the Projected First Year Weather Normalized Unit Savings to the total energy consumption during the Baseline Period for the corresponding energy type. Project Totals are normalized to MMBtu using conversion factors of 3.4123 kWh/MMBtu and 10 therms/MMBtu.

Scenario Comparison

- **Project Costs**
  - Net Installed Costs
- **Finance Terms**
  - PACE vs. Bank
  - 20 Yrs vs. 5 Years
  - Pymnts Differential
- **Amount Financed**
  - PACE includes Admin Fee
- **Financial Metrics**
  - NPV of Cash Flows
  - Savings Inv Ratios (SIRs)
- **Projected Cash Flows (5 Yrs)**
  - PACE = Positive Immediately
  - Bank = Negative Full Term

	Recommended	Alternatives
Project Costs	PACE 100% Financed, 20 Years @ 6%	Bank Loan 80% Financed, 5 Years@5%	
Net Installed Cost	$1,992,683	$1,992,683	
Percent Financed	100.0%	80.0%	
Owner Equity Contribution	$0	$398,537	
Finance Terms			
Interest Rate	6.00%	5.00%	
Finance Term	20 years	5 years	
Annual Payments	$171,402	$361,054	
Amount Financed			
Program Administration Fee	$47,346	$0	
Total Amount Financed	$2,040,029	$1,594,146	
Key Financial Metrics			
Asset Value Increase	$2,708,021	$2,708,021	
Net Present Value (NPV)	$1,399,910	$1,725,163	
Savings to Investment Ratio (SIR)	1.82	3.46	
Projected Cash Flows			

Projected cash flows over the initial 5 years.
(including initial investment)



Total Cash Flows (5 years)	$487,759	($859,040)
Time to Positive Cash Flow *	Immediate	N/A

* Indicates the first time during the term at which the cumulative projected cash flows, including initial investment, are positive.