

EBMUD WaterSmart PAYS

“Pay as You Save” On-Bill Financing Pilot Study Update



Finance-Administration Committee

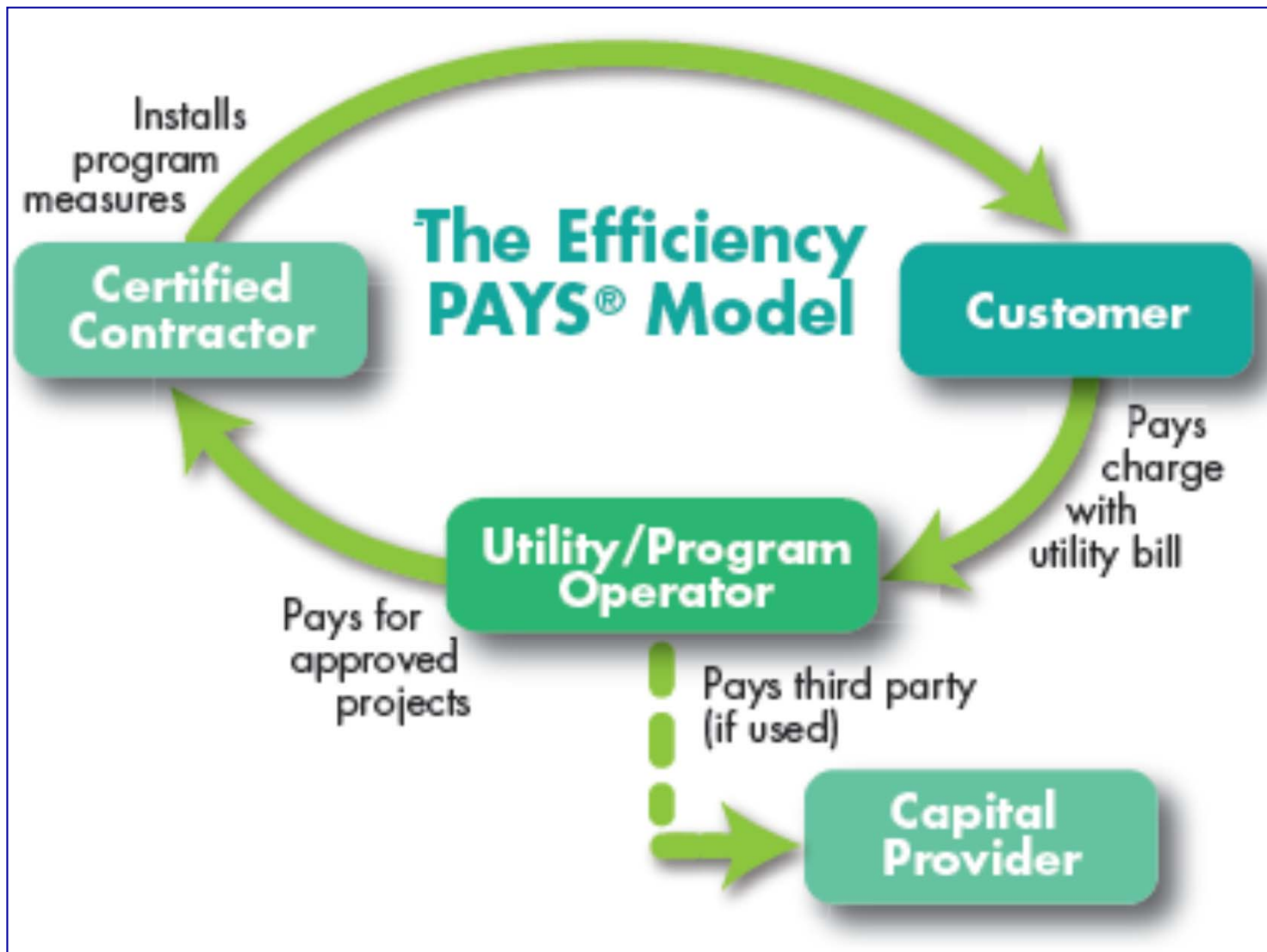
July 28, 2015

Presentation Outline



- Recap of PAYS Framework
- Summary of PAYS vs PACE Programs
- District Pilot Study Approach and Efforts To Date
- Pilot Study Participants and Evaluation
- Next Steps/Looking Forward

PAYS Financing Framework

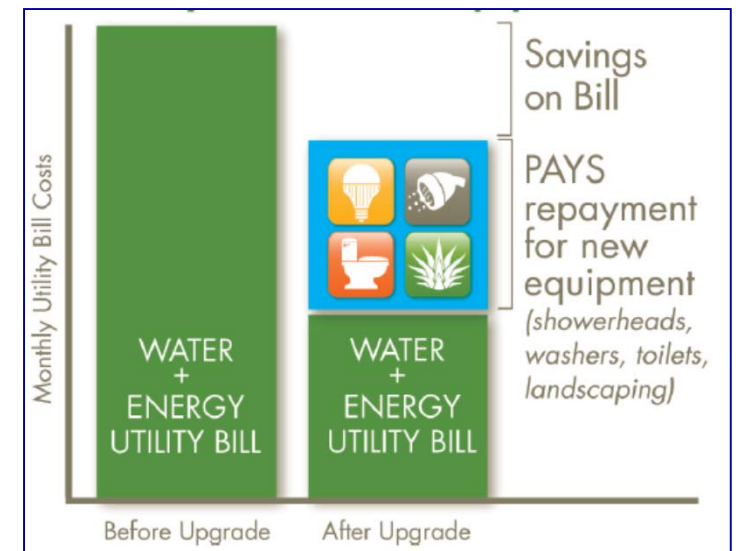


Pay as You Save (PAYS) Concept



Intended as RISK FREE offer for customer

- No upfront payment
- Utility bills immediately lower
- No loan, no lien, and no debt
- If customer leaves, obligation stays with property (and meter)
- Contractor bonding ensures problems found will be fixed
- General program design to cover cost of implementation



PAYS vs PACE Comparison



Program Terms/Conditions	PACE	PAYS®
No initial customer cost	✓	✓
No credit check or liens	✓	✓
Debt obligation resides with the property	✓	✓
Customer charge is less than estimated savings		✓
Payments end if customer leaves location	✓	✓
Payments end if measure fails, is not repaired		✓
Repair costs do not increase monthly payment		✓
Services available District wide		✓
Eligible measures align with District goals		✓
Minimum eligible project costs	✓	
Tenants and new development can participate		✓




EBMUD WaterSmart PAYS On-Bill Financing Approach



- Assess feasibility of conservation revolving fund
 - Self-sustaining program model
 - Stretch District's conservation budget
 - Repurpose rebate funds
- Increase customer participation in conservation improvements
 - Target hard to reach sectors
 - Target multiple conservation measures
 - Assist in community compliance with codes, laws
- Achieve water supply reliability goals

Proposed EBMUD PAYS Ph. 1 Pilot Candidates (10-15 Accts.)



Market Sector	Business Classification	Candidate Water-Efficient Products
MF Residential <i>~(6) Accts</i> <i>~(90) units</i>	5 or more units on one meter, and mobile home parks	<ul style="list-style-type: none"> • high-efficiency toilets • high-efficiency washers • faucets • turf conversion • drip irrigation • submetering • sprinkler retrofit • weather-based controller • graywater systems • boilerless steamers • waterless wok ranges • air-cooled ice machines • pre-rinse spray valves • commercial dish machines   
Landscape <i>(1-2) Resid.</i> <i>(1-2) Comm.</i>	ornamental landscapes, planter strips, median strips, golf and country clubs, botanical gardens, aquariums	
Food Service <i>(1) General</i> <i>(1) Franchise</i> <i>(1) Institution</i>	commercial eating places, restaurants; commercial eating places, fast food; commercial food sales	

EBMUD PAYS Pilot Study Customer Outreach



- Reviewed more than 230 Water Conservation Database records
- Collected 26 Multi-family (property) surveys:
 - Cities of Oakland, Emeryville, San Pablo, Richmond
 - Property sizing of 20 to 144 dwelling units
 - Data on number of units, occupants, plumbing fixtures, and irrigation practices (est. of gpcd)
- HOAs in Danville and Alameda interested in financing common area landscape conversions

Pre-Screened & Pre-Approved PAYS Measure Calculation Tool



- Customer property details
- Proposed conservation measures
- Water use assumptions (gal/fixture/person/day)
- Utility rates (water, sewer, energy)
- Installation, financing, admin. costs
- Surcharge & repayment term

EBMUD WaterSmart PAYS® | Program Assumptions

Assumption	Default	Custom
<i>Housing/occupancy characteristics</i>		
Average household size (occupied units)	1.75	2.00
Rental vacancy rate	4.8%	0.0%
Average household size (all units)	1.67	2.00
Toilets per unit	1.00	1.00
Showerheads per unit	1.00	1.00
Bathroom faucets per unit	1.00	1.00
<i>Resource use</i>		
Estimated use as % of national use	75%	100%
Flushes/person/day	4.76	4.76
Shower minutes/person/day	6.30	6.30
Bathroom faucet gallons/person/day	3.10	3.10
Kitchen faucet gallons/person/day	6.90	6.90
Faucet aerator savings rate	20%	20%
Hot water % of total faucet water use	73%	73%

EBMUD PAYS Ph. 1 Pilot Study Candidate Participants



Sample Customer Description	Proposed Measures	Total Cost (@4%-8% interest)	Avg. Bi-monthly Savings	Bi-monthly Surcharge	Repayment Term (Years)
MFR building 16 units high occupancy	16 Toilets 16 showerheads 16 bath aerators	\$4,250 - \$4,500	\$490	\$375 - \$390	1.8 - 2.0
MFR building 30 units	30 Toilets 30 showerheads 30 kitchen and 30 bath aerators	\$8,690 - \$9,670	\$410	\$325 - \$360	4.5 - 5.0
MFR building 92 units (some two-bath)	102 Toilets 102 showerheads 92 kitchen and 102 bath aerators	\$28,150 - \$29,460	\$2,890	\$2,450 - \$2,560	2.0 - 2.2
MFR building 15 units (most retrofitted)	4 Toilets 6 showerheads 16 bath aerators	\$1,050 - \$1,100	\$115	\$90 - \$95	2.0 - 2.2

Total Cost: \$42,140 - \$44,730

Estimated Water Savings: 555,632 Gal/Yr.

Sample Water Bill w/PAYS Surcharge



For: 1234 Pipeline St. Private Residence	AMOUNT	TOTAL
PREVIOUS CHARGES AND CREDITS		
PREVIOUS AMOUNT DUE	186.14	
FULL PAYMENT - 06/04/15	-187.36	-1.22
WATER CHARGES - EBMUD		
WATER SERVICE CHARGE	31.71	
WATER FLOW CHARGE		
(05/13/15-06/30/15) 12 UNITS @2.91	34.92	
8 UNITS @3.60	28.80	
(07/01/15-07/16/15) 3 UNITS @2.95	8.85	
2 UNITS @4.06	8.12	
DROUGHT SURCHARGE	4.12	
WC ON BILL FINANCE SURCHARGE	40.00	156.52
WASTEWATER CHARGES - EBMUD		
WASTEWATER TREATMENT CHARGE	43.53	
SF BAY POLLUTION PREVENTION FEE	0.40	43.93
CITY OF BERKELEY SEWER SERVICE		86.33
PLEASE SEE REVERSE SIDE FOR BILLING EXPLANATION		285.56

Pilot Study Evaluation



- Target water savings
- Customer interest, satisfaction
- Process and procedures
- Roles and responsibilities (internal/external)
- Are there sufficient certified or customer-provided contractors to perform work?
- Program cost-effectiveness

PAYS Ph. 1 Pilot Next Steps



August 2015

- Complete outreach/modeling to candidate participants
- Finalize PAYS surcharge billing and tracking procedures
- Finalize pilot contractual agreements, collateral materials

September 2015

- Launch Phase 1 pilot with interested customers (10-15)
- Pursue as available *CalConserve Water-Use Efficiency Revolving Fund* loans (proposed \$10M fund over 20 yrs.)
- Support BayREN efforts on regional PAYS concepts (e.g. Joint Powers Authority)