

Growing the U.S. Commercial Solar Water Heating Market

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Who is Nextility?

- Founded by three entrepreneurs under the age of 25 in 2009 in Washington, DC as Skyline Innovations
- Mission: Break down the barriers to renewable energy adoption from small to mid-size commercial customers
- Started with solar water heating
- Have added solar PV and energy brokerage
- Grown from three employees in Washington, DC in 2009 to over 60 employees in DC, California, and Puerto Rico



What Barriers Needed Breaking Down?

UP FRONT COST

- Average commercial systems cost between \$100,000 \$1 million (\$80 \$120 per square foot)
- Solar water heating has lots of fixed costs, hard to gain economies of scale on small commercial projects



What Barriers Needed Breaking Down?

LOW NATURAL GAS PRICES

- Most US Water Heating done with Natural Gas
- Prices range from \$0.70 -\$1.10 per therm (\$0.024 -\$0.038 per kWh)
- Total monetary savings is low, simple project payback period is long





What Barriers Needed Breaking Down?

LONG-TERM UNCERTAINTY

- Solar Water Heating system Performance less understood than PV
- Most commercial system sizing for maximum total energy offset, not financial optimization
- Customer and installer incentives not aligned



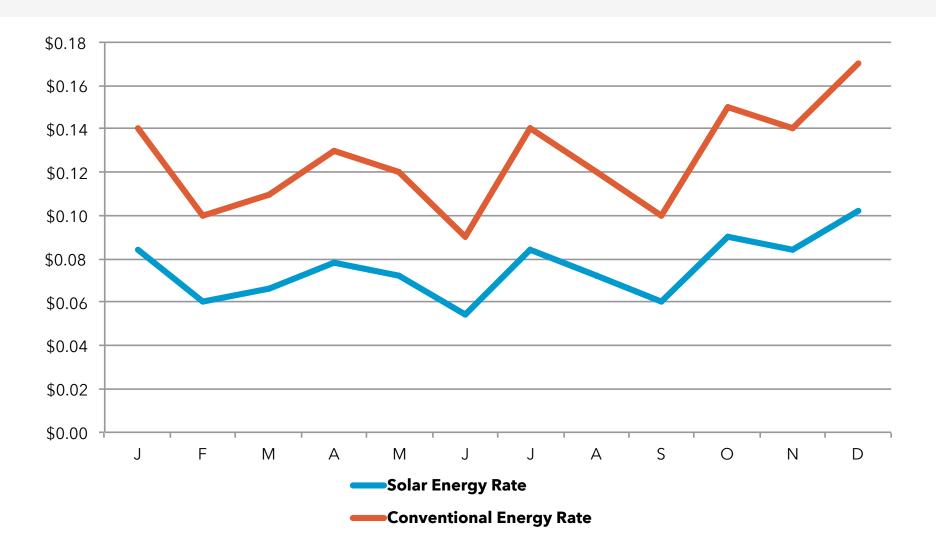
How Does Nextility Overcome This Uncertainty?

NEXTILITY FINANCING MODEL

- Nextility pays for 100% of installation of system for qualified buildings
- Bills the customer through an indexed power purchase agreement, guaranteeing the rate will always be below the utility rate
- Provides 24/7 remote system performance monitoring and covers 100% of all maintenance over the length of the contract



Price-Indexed Energy (PIE)





Price-Indexed Energy (PIE)

BEFORE SOLAR

Utility Energy Bill



CONTRACT

Your Savings

Savings Shared with Nextility

Utility Energy Bill



AFTER CONTRACT

Your Savings

Utility Energy Bill

CUSTOMER TAKES
FULL OWNERSHIP
OF THE SYSTEM,
BENEFITTING FROM
100% OF ENERGY
SAVINGS







√ >1,500 square feet



What's a Qualified Building?



Multifamily: 40 units / 60 residents



College Dormitories: Minimum 100 residents



Hospitality



Industrial Applications



Really, any commercial property using >1,500 gallons of hot water daily on a single, central water heating system



How Does the Financing Model Work?

FINANCIAL INCENTIVES

- 30% Federal Investment Tax Credit
- Local State Incentives
 - Solar Renewable Energy Credits
 - State Tax Credits
 - State Cash Grants
- Nextility partners with solar project funds



Which US States Support Solar Water Heating?





What About System Performance?

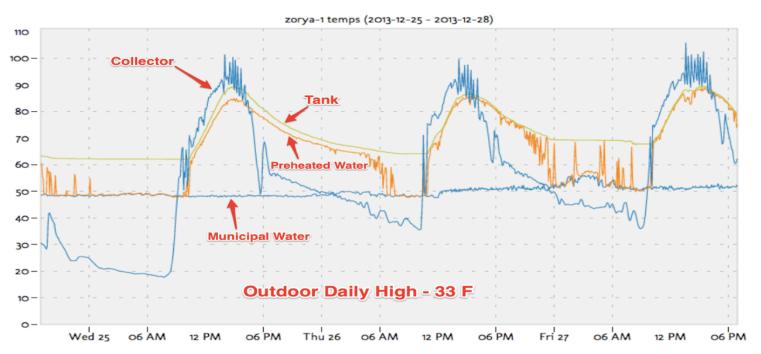
SkyBox





What About System Performance?

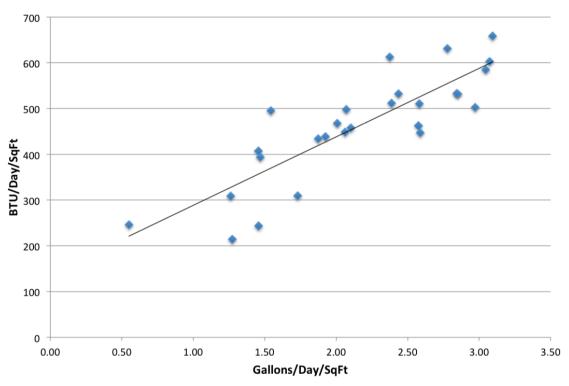
EUREKA!



- Remote connectivity to all systems
- 15 points of measurement
- Automatic flagging of maintenance issues



What About System Performance?

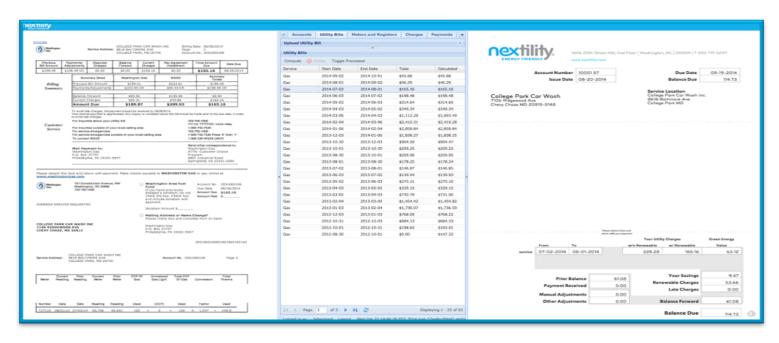


- Best predictor of system performance? Ratio of gallons per day hot water use per total square feet of collectors
- Nextility has used many different collectors, both tubes and flat plates. Collector performance matters, but often not as much as system configuration



And Customer Billing?

ReeBill



- Character recognition software breaks apart customer utility bill
- System production data from Eureka! spliced in
- Determines monthly customer savings to the penny



Working with Nextility

- As with every financed solar project there are three major factors:
 - Cost of installation
 - Fuel price
 - Available Incentives
- Every project has an install cost that makes it work for our model
 - (Often, that install cost is impossible to hit)
- So, we target the following states where incentives make it easiest to compete
 - DC
 - Maryland
 - California
 - Hawaii



Thank You!





Tuelyn Terrace Los Angeles, CA



