



Billing.Energy

Power with a Payback

<https://billing.energy>
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About Chiquita Fresh North America (Chiquita) and Harry Ross Industries (HRI)



Chiquita operates as a fruit producing company. The Company grows, procures, markets, and sells bananas, pineapples, and other fruits. Chiquita helps to create a positive impact by implementing the

principles of sustainability in all its business practices under the “Behind the Blue Sticker” initiative.

Harry Ross Industries A GENERAL PARTNERSHIP

HRI is a family owned real estate investment company, specializing in industrial real estate. HRI has also diversified into solar power. HRI currently owns and operates four solar farms that produce 5 megawatts of electricity.

In 2017 HRI built the world’s largest rooftop tracking solar system to power Chiquita’s cold storage facility which has approximately 400 refrigerator trucks on the property. This collaboration is a win-win for HRI and Chiquita.

Chiquita and HRI BEFORE adding Billing.Energy

Electricity is the major operating cost of cold storage. To win Chiquita’s business, HRI proposed using solar power to reduce Chiquita’s electricity bill. HRI pays for installation and maintenance of the solar system. Chiquita buys power from HRI at local utility rates.



The Challenge: How to bill energy? Why are PPAs bad?

One solution for billing energy is a power purchase agreement (PPA). HRI considered drafting such an agreement to provide power to Chiquita at a fixed fee for 20 years, with a 3-5% per year rate escalator.

PPAs introduced risk for both Chiquita and HRI:

1. A binding 25 year contract.
2. *It’s difficult to predict energy pricing.* If market price for energy increases faster than the PPA’s defined fixed rate + escalator, HRI suffers lost profits. If energy prices increase slower than expected, Chiquita ends up with a larger energy bill than if they had bought power directly from Southern California Edison (SCE).
3. *It’s difficult to predict energy consumption.* Higher than expected consumption reduces HRI’s profits as more grid power is purchased at local utility rates, and sold to Chiquita at a discounted fixed rate. Lower consumption means that Chiquita is contractually obligated to pay for electricity they may not need.



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How Does Billing.Energy work?

- Billing.Energy Collects Meter Data:**
HRI installed **AlsoEnergy** revenue grade meters to measure solar production and grid power consumption. Billing.Energy provides automated monitoring and billing by pulling usage data from these meters daily.
- Chiquita pays HRI monthly:**
Chiquita is invoiced using SCE's TOU-8 TIME OF USE OPTION B rate schedule. Billing.Energy automatically re-creates the SCE bill, including updated fees, tax and time of use (TOU) charges.

3RD STREET OXNARD, LLC

Electricity supplied by
3RD STREET OXNARD, LLC &
Southern California Edison

Details of New Charges			
RATE: TOU-8-B TIME-OF-USE - GENERAL SERVICE - LARGE			
BILLING PERIOD: 1/14/2022 - 2/2/2022			
TOTAL DAYS: 29			
TOTAL USAGE: 167,083 kWh			
Energy Charges			
Generation Winter Mid-Peak	60,036 kWh	x 7.122¢	\$4,275.76
Generation Winter Off-Peak	107,047 kWh	x 4.418¢	\$4,729.34
Subtotal			\$9,005.10
Demand Charges			
Demand Charge Distribution	406.0 kW	x \$23.57	\$9,569.42
Demand Charge Transmission	406.0 kW	x \$6.03	\$2,448.18
Subtotal			\$12,017.60
Other Delivery Charges			
Public Purpose Programs	167,082 kWh	x 1.711¢	\$2,858.77
New System Generation Charge	167,082 kWh	x 0.861¢	\$1,438.58
Department of Water Resources Bond	167,082 kWh	x 0.652¢	\$1,089.37
Distribution	167,082 kWh	x 0.127¢	\$212.19
Transmission	167,082 kWh	x 0.100¢	\$167.08
Nuclear Decommissioning Charge	167,082 kWh	x 0.010¢	\$16.71
Customer Charge, Below 2 kV	1.0 months	x \$716.13	\$716.13
Power Factor Adjustment, per kVAr	406.0 kVAr	x 60.000¢	\$243.60
Subtotal			\$6,742.43
State Taxes and Fees			
State Surcharge Tax	167,083 kWh	x 0.030¢	\$50.12
Your new charges			\$27,815.26

Chiquita and HRI AFTER adding Billing.Energy

HRI Investment	
1.3MW Solar Cost	\$3,750,750
368,000 sqft Roof Cost	\$1,288,000
Total Cost (for tax benefit)	\$5,038,750

HRI Tax Benefits	
Solar tax credit (30%)	\$1,511,625
Fed bonus depr. (21%)	\$899,416
CA State depr. (11%)	\$471,123
Total Tax Benefit	\$2,882,164
Solar Cost After Taxes	\$868,586
HRI Return on Investment	
Yearly NOI / Energy Profits	\$305,504
Break Even	3.1 years
Avg ROI (w/out incentives)	15.55%
Avg ROI (w/tax incentives)	18.62%
CAP Rate	6.5%
Increased Prop Value (Y1)	\$4,700,061

Billing.Energy turned idle rooftop into meaningful value for all parties:

- Chiquita agreed to pay HRI prevailing rates for electricity over the lease term, discounted by \$25k/year.
- HRI invested \$5M in roof and solar upgrades. Solar allowed HRI to take advantage of tax credits and bonus depreciation, reducing the total after tax investment to \$2.2M: ~\$1.3M for the roof repair and upgrade, and ~\$900k for the 1.3MW solar system.
- HRI bills Chiquita \$650k per year for energy, resulting in over **\$300k** of new NOI and profits. That's Power with a Payback™
- HRI increased the overall building value from **\$25M to \$40M**, thanks to new energy profits, securing a long term lease with Chiquita, and other building improvements.



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Results: Increased Revenues and Building Value

HRI Benefits:	Chiquita Benefits:
<ul style="list-style-type: none"> • > \$300k/year in additional NOI / profits • ~ \$5M 1st year increase in building market value with <i>no property tax increase</i> • \$13.7M - new revenues from solar (25 years) • Extended lease term thanks to energy savings 	<ul style="list-style-type: none"> • \$25k/year in electricity savings • All annual roof warranty duration of warranty, transferable? maintenance costs included in the solar maintenance plan • Going green helped meet “Behind the Blue Sticker” sustainability goals

Detailed Analysis

Year	Billing Revenue	Ongoing Fees	Tax Incentives	NOI	Yearly ROI	Cash Flow
	<i>Revenue collected from Chiquita for electricity</i>	<i>Grid power, roof and solar maint. fees</i>	<i>Federal and state solar incentives</i>	<i>Net operating income, profit</i>	<i>ROI = (NOI + Incentives) ÷ Solar Cost</i>	<i>Cashflow after solar</i>
0	\$0	\$0	\$0	\$0	N/A	(\$3,750,750)
1*	\$652,233	(\$346,728)	\$2,505,267	\$305,505	74.94%	(\$939,979)
2	\$684,844	(\$364,064)	\$150,759	\$320,780	12.57%	(\$468,440)
3	\$719,086	(\$382,268)	\$90,456	\$336,819	11.39%	(\$41,165)
4	\$755,041	(\$401,381)	\$54,273	\$353,660	10.88%	\$366,768
5	\$792,793	(\$421,450)	\$54,273	\$371,343	11.35%	\$792,384
6	\$832,432	(\$442,523)	\$27,137	\$389,910	11.12%	\$1,209,431
...						
25	\$2,103,515	(\$1,118,232)	\$0	\$985,283	26.27%	\$13,712,262

* 1st year actuals, years 2-25 are projections based on 5% estimated annual rate escalator for electricity

As seen above, break even occurs at 3.1 years. We can also estimate new building value by taking the additional NOI - \$305,505 and a cap rate of 6.5%, $\$305,505 / 6.5\% = \$4.7M$ in new building value.



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For comparison, let's say HRI had decided to put no money down and taken a typical construction loan to pay for the solar at 5%, with payments based on a term of 30 years and a balloon payment after 7 years:

Year	Billing Revenue	Ongoing Fees	Tax Incentives	NOI	Loan Payment	Cash Flow
	<i>Revenue collected from Chiquita for electricity</i>	<i>Grid power, roof and solar maint. fees</i>	<i>Federal and state solar incentives</i>	<i>Net operating income</i>	<i>5%, 30 year with 7 year balloon</i>	<i>Cash Flow after solar</i>
0	\$0	\$0	\$0	\$0	\$3,750,750	\$0
1	\$652,233	(\$346,728)	\$2,505,267	\$305,505	(\$241,618)	\$2,569,153
2	\$684,844	(\$364,064)	\$150,759	\$320,780	(\$241,618)	\$2,799,074
3	\$719,086	(\$382,268)	\$90,456	\$336,819	(\$241,618)	\$2,984,730
4	\$755,041	(\$401,381)	\$54,273	\$353,660	(\$241,618)	\$3,151,046
5	\$792,793	(\$421,450)	\$54,273	\$371,343	(\$241,618)	\$3,335,044
6	\$832,432	(\$442,523)	\$27,137	\$389,910	(\$241,618)	\$3,510,472
7	\$874,054	(\$464,649)	\$0	\$409,405	(\$3,540,216)	\$379,661
...						
25	\$2,103,515	(\$1,118,232)	\$0	\$985,283	\$0	\$12,473,088

At the end of 25 years, the profit with financing is \$12.4M rather than \$13.7M. Cashflow stays positive.

Customer Quotes

“It was a no brainer. After the tax breaks, the solar system practically paid for itself, and we had a new warrantied and maintained roof and solar system. Billing.Energy has made our transition to solar on our tenant occupied buildings possible and profitable.” - Rob Ross, HRI.