

consulting LLC

Facilitated Financing for Building-Scale Energy Improvements

EutecticsLLC.com

Deutsche Bank, March 2012:

In U.S. building retrofit market:

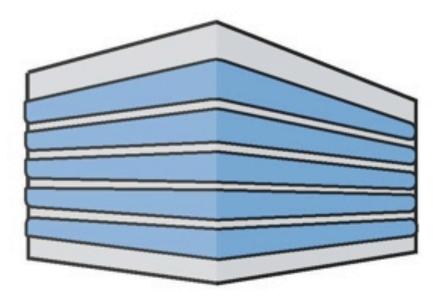
- \$1 Trillion in energy savings
- 3.3 Million jobs over 10 years
- Upfront cost of \$279 Billion
- Reduce consumption 30%
- Reduce CO2 by 10% (600MMT)



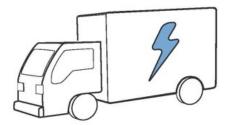


Building Owner





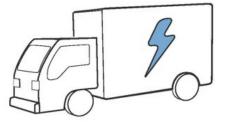
"We know how to cut energy costs!"



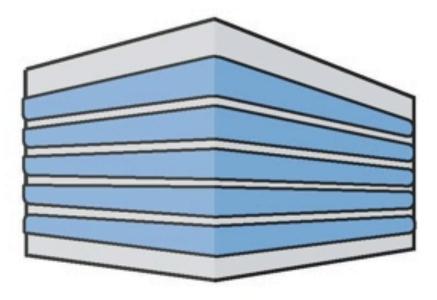
Energy Contractor



"But times are tight how will I pay for the upfront costs?"







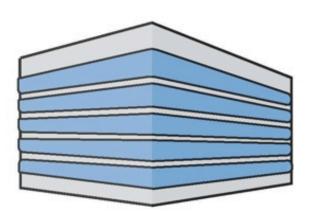
What about tax credits? Rebates? Will that help?

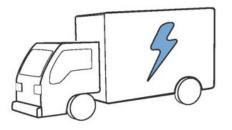




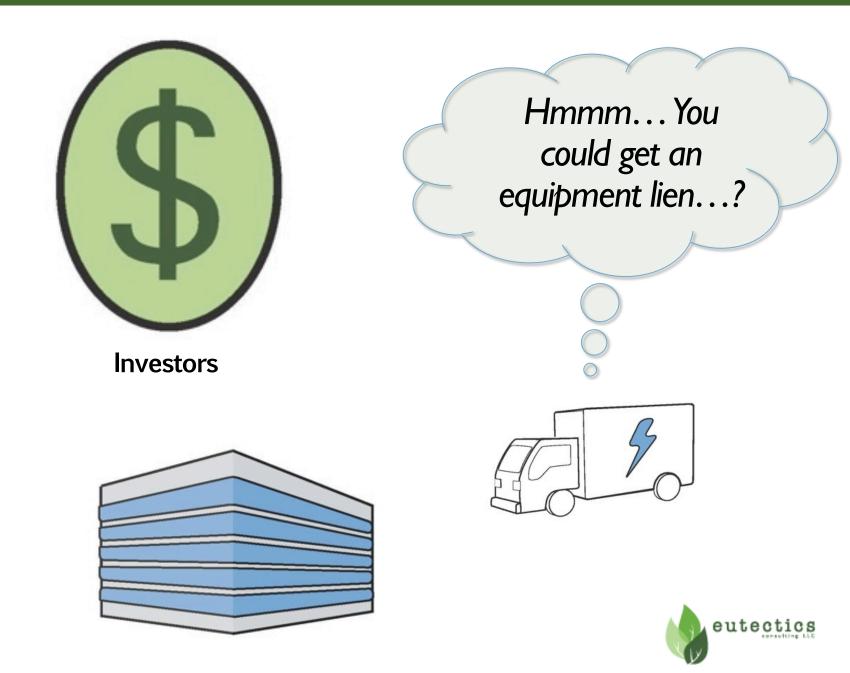


Investors



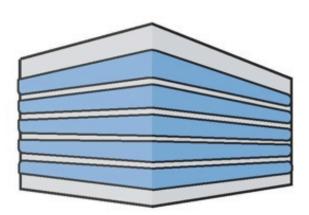


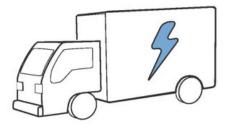






Investors





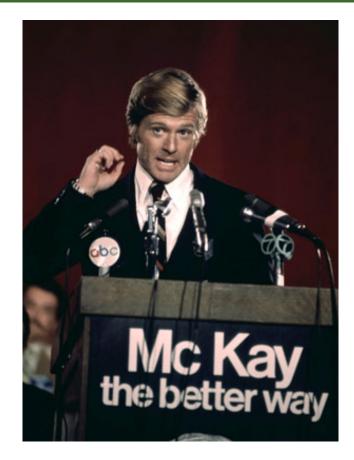


But, my utility costs are **STILL** way too high! Help!

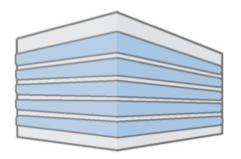








There's got to be a better way...!

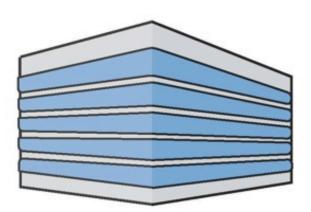


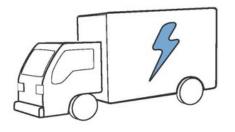
















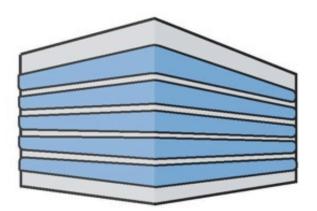
Property Assessed. Clean Energy.

- Building-scale energy improvements
- Secured by a special assessment
- Paid back via property taxes



Ex. 1: Restaurant upgrade - LED lights and controls

5 Year PACE



TOTAL COST:	\$ 50,622
Xcel efficiency rebate	11,314
TOTAL PACE LOAN	\$39,308
TOTAL DOWN	<u>\$ 0</u>
PACE loan repayment	9,334

Energy and operations savings	15,296
first year, adjust upwards 2.25% annually	

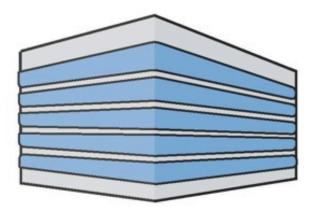
TOTAL	SAVED	/ YRS	1-5	\$6,383

TOTAL SAVED / YR 6+ <u>\$17,096</u>



Ex. 2: 40kW Solar PV w LED lighting upgrade

5 Year PACE



TOTAL COST: \$180,500

Investor Tax Credit	54,150
Utility Lighting Rebate	3,000
EPACT Tax Deduction	3,200

Net to Finance \$174,300 Owner Contribution 19,480 Green Loan - 4% 50,000

TOTAL PACE LOAN \$111,020

PACE loan repayment	25,131
Energy savings and displacement	13,693
with avg. annual energy inflation of 2.25%	

TOTAL AVG. COST / YRS 1-5 \$10,128

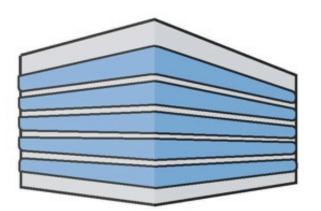
TOTAL SAVED / YR 6+ \$15,304



¢520 270

Ex. 3: 200kW Solar PV w no state incentive

20 Year PACE



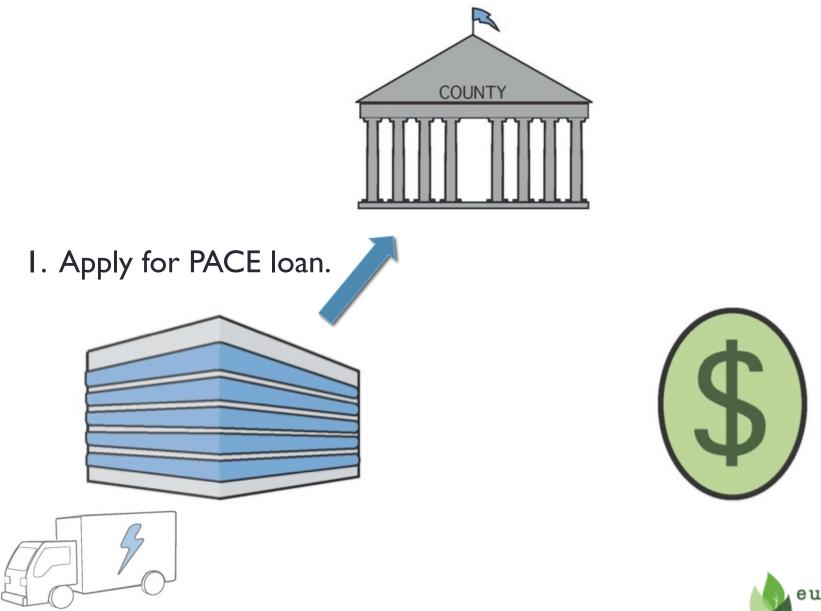
	\$539,270
Investor Tax Credit	161,780
Net to Finance Owner Contribution	\$539,270 0
	•
TOTAL PACE FINANCING	\$539,270
TOTAL PACE FINANCING PACE loan repayment	\$539,270 49,890

TOTAL COST.

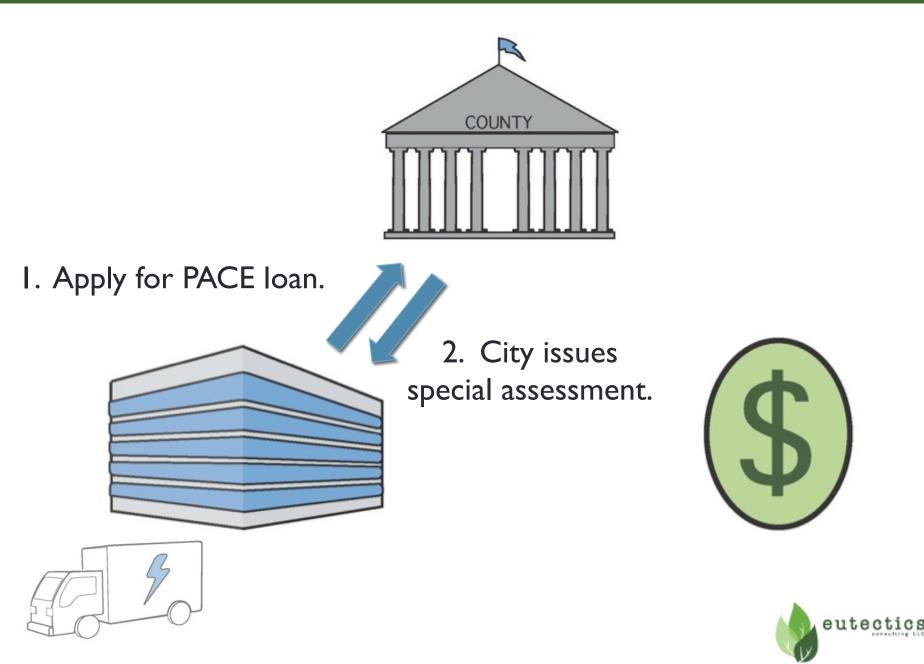
with avg. annual energy inflation of 2.25%

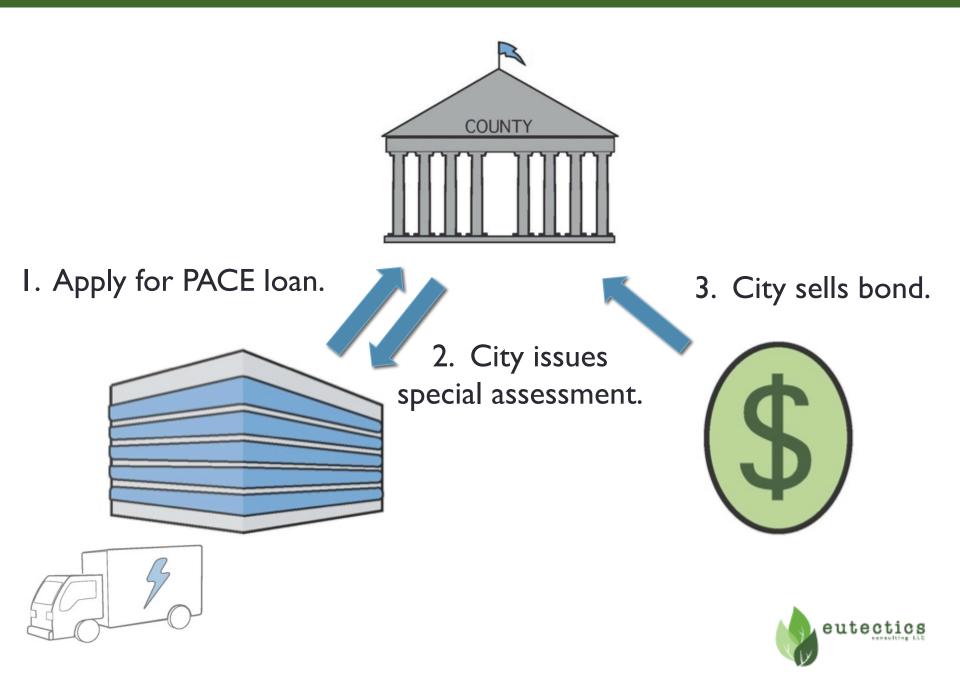
TOTAL NET / YR I	\$163,65 <u>2</u>
NET AFTER 20 YEARS	\$ 97 <u>,255</u>

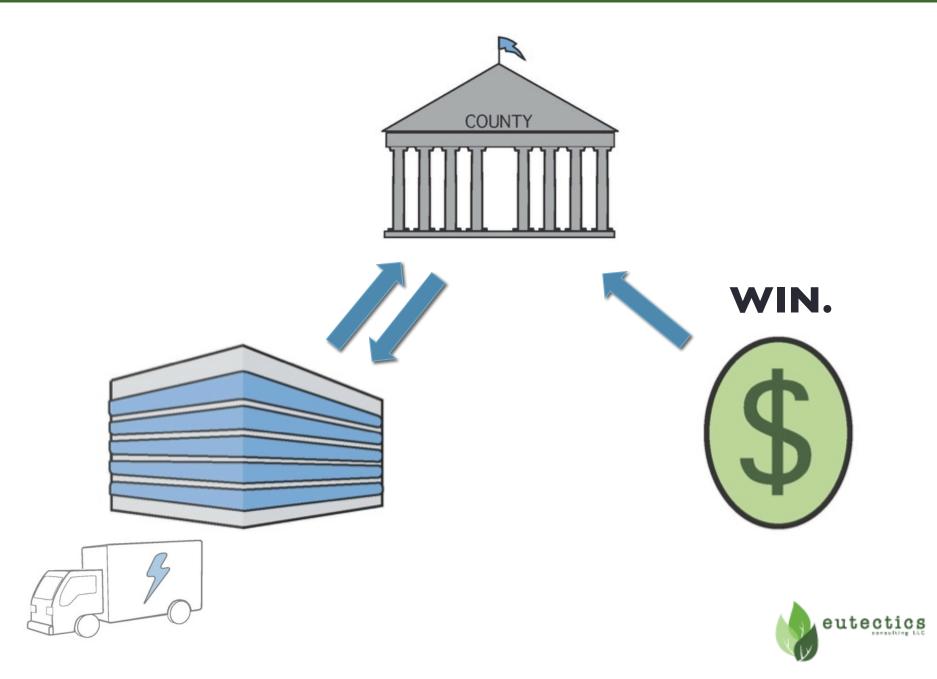


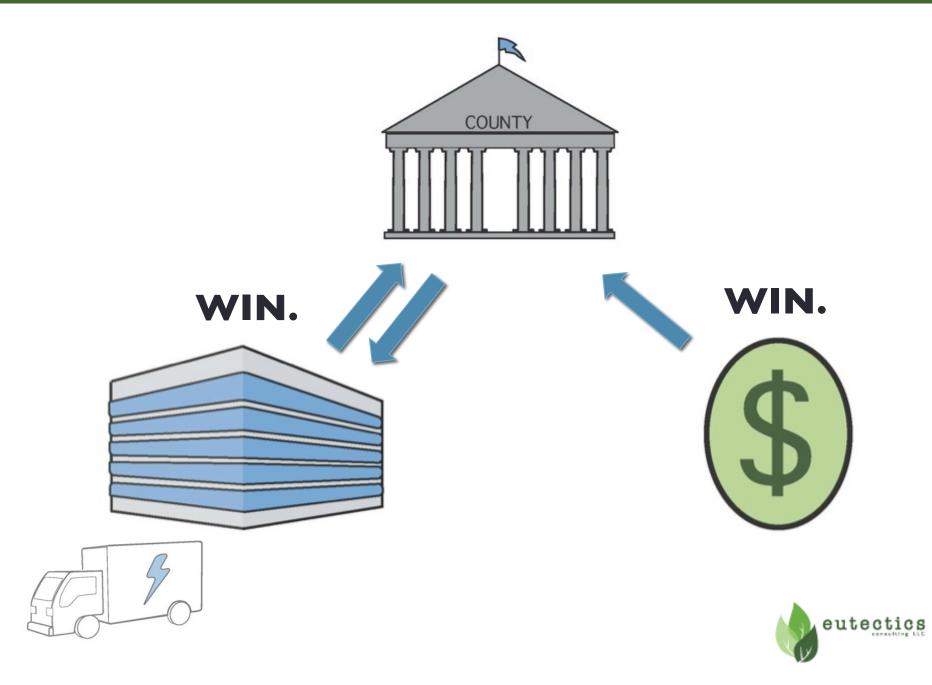


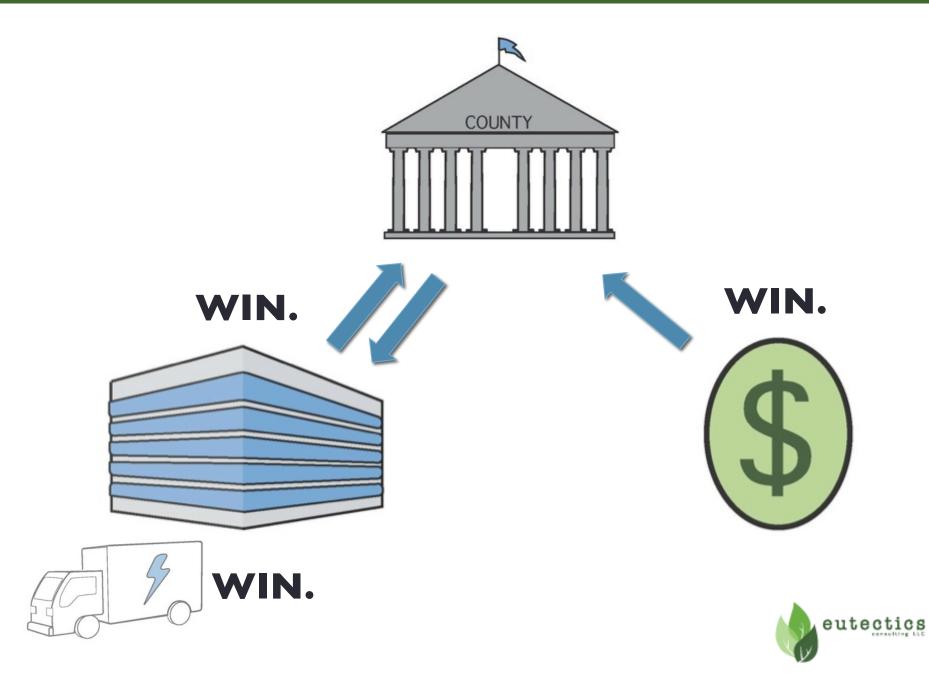


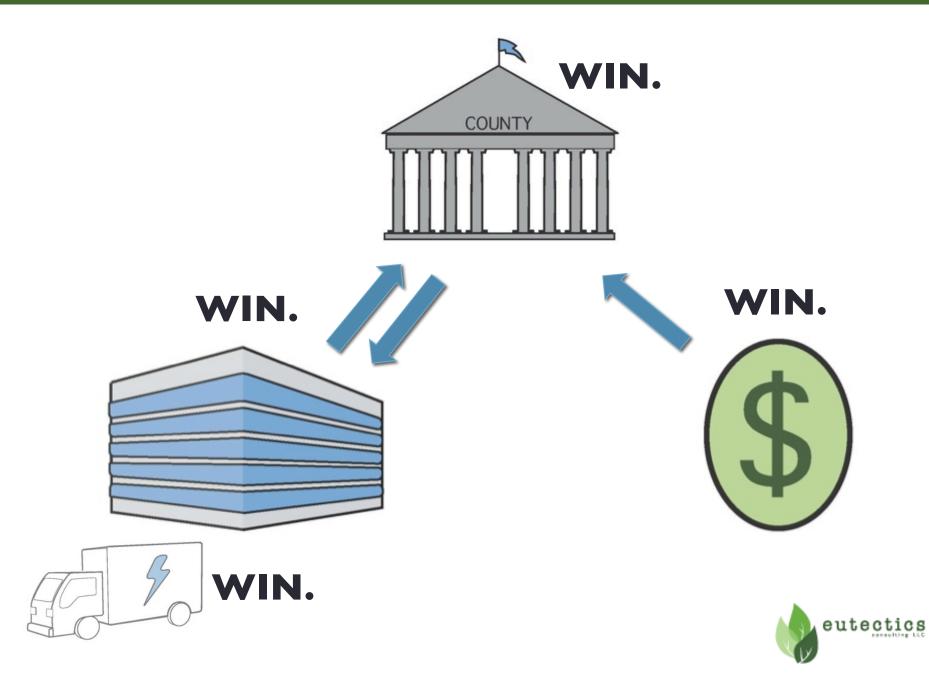












- Zero-down, cash-flow-friendly
- Low-cost capital
- Easy process with local partners



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- Low-cost capital
- Easy process with local partners



Conventional financing for solar made easy.



Monetizing multiple revenue streams, consolidating into one monthly payment.

"Cash-flow-positive"- consolidated benefits exceed payments.



Tax benefits and all incentives accrue to the building owner.

Repayment is tied to the length and scope of solar production and all incentives.



SolarNoteTM offspring

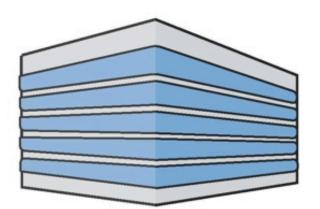
- SmallBiz SolarNote[™]
- Public Building SolarNote[™]
- Residential SolarNote[™]



SolarNote™ v1.0:

40kW Solar for Car Dealership

2012



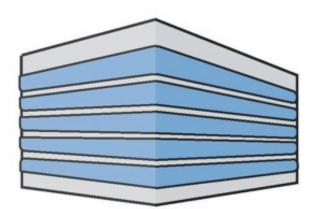
TOTAL COST:	\$263,340
Investor Tax Credit	79,002
SolarRewards Rebate	59,850
Made in Minnesota Incentive	19,631
Owner Contribution	0
53 Monthly Payments	\$8 09
CUMULATIVE COST:	\$18,06 <u>5</u>
Break-even within 7 years	
ANNUAL SOLAR PRODUCT	ION
AFTER Year 7	\$ 3,920
25 Year NPV:	\$ 34,378



SolarNote™ v1.0:

40kW Solar for Car Dealership

2012



TOTAL COST:	\$263,340
Investor Tax Credit	79,002
SolarRewards Rebate	59,850
Made in Minnesota Incentive	19,631
Owner Contribution	0
53 Monthly Payments	\$809
CUMULATIVE COST:	\$18,065
Break-even within 7 years	
ANNUAL SOLAR PRODU	CTION
AFTER Year 7	\$ 3,920
25 Year NPV:	\$ 34,378
	÷ = 1,570
	eutectics

	2013 Year 0				2015 Year 2			2017 Year 4	
Energy Sales	\$ 3,280	\$	6,560	\$	6,708	\$	6,859	\$	7,013
Depreciation-fed		\$	19,933	\$	23,919	\$	12,429	\$	-
Depreciation - state		\$	5,581	\$	6,697	\$	4,018	\$	2,538
Interest Paid - fed		\$	1,116	\$	2,258	\$	1,140	\$	757
Interest Paid - state		\$	313	\$	632	\$	319	\$	212
Federal Investor Tax Credit		\$	80,400						
Minnesota Made	\$ 20,190	\$	20,190	\$	20,190	\$	20,190	\$	20,190
Solar Rewards	\$ 59,850	\$	-	\$	-	\$	-	\$	-

	2013 Year 0				2015 Year 2	2016 Year 3			2017 Year 4	
Energy Sales	\$ 3,280	\$	6,560	\$	6,708	\$	6,859	\$	7,013	
Depreciation- fed		\$	19,933	\$	23,919	\$	12,429	\$	-	
Depreciation - state		\$	5,581	\$	6,697	\$	4,018	\$	2,538	
Interest Paid - fed		\$	1,116	\$	2,258	\$	1,140	\$	757	
Interest Paid - state		\$	313	\$	632	\$	319	\$	212	
Federal Investor Tax Credit		\$	80,400							
Minnesota Made	\$ 20,190	\$	20,190	\$	20,190	\$	20,190	\$	20,190	
Solar Rewards	\$ 59,850	\$		\$	-	\$	-	\$	-	

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Depreciation - state	:	\$	5,581	\$	6,697	\$	4,018	\$	2,538
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Federal Investor Tax Credit		\$8	30,400						
Minnesota Made	\$ 20,190	\$ 2	20,190	\$	20,190	\$	20,190	\$	20,190
Solar Rewards	\$ 59,850	\$	•	\$		\$	-	\$	-

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Depreciation- fed		\$ 19,933	\$ 23,919	\$ 12,429	\$ -
Depreciation - state		\$ 5,581	\$ 6,697	\$ 4,018	\$ 2,538
Interest Paid - fed		\$ 1,116	\$ 2,258	\$ 1,140	\$ 757
Interest Paid - state		\$ 313	\$ 632	\$ 319	\$ 212
Federal Investor Tax Credit		\$ 80,400			
Minnesota Made	\$ 20,190	\$ 20,190	\$ 20,190	\$ 20,190	\$ 20,190
Solar Rewards	\$ 59,850	\$ -	\$ _	\$ -	\$ -

	2013 Year 0		2014 Year 1		2015 Year 2	2016 Year 3			2017 Year 4	
Energy Sales	3,280	\$	6,560	\$	6,708	\$	6,859	\$	7,013	
Depreciation-fed		Ś	19,933	\$	23,919	\$	12,429	Ś		
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Federal Investor Tax Credit		\$	80,400							
Minnesota Made 💲	20,190	\$	20,190	\$	20,190	\$	20,190	\$	20,190	
Solar Rewards \$	59,850	\$	-	\$	-	\$	-	\$	-	

Payment	Date	Pay	ment	In	centive		Interest	I	Principle		Balance	Incentive Payments
	7/1/13									\$	187,960	
1	8/1/13	\$	809	\$		\$	647	\$	162	\$	187,798	
2	9/1/13	\$	809	\$	-	\$	647	\$	162	\$	187,636	
3	10/1/13	\$	809	\$	-	\$	625	\$	183	\$	187,453	
1												
11	6/1/14	\$	809	\$	-	\$	641	\$	168	\$	186,026	
12	7/1/14	\$	809	\$	-	\$	620	\$	189	\$	185,837	
13	8/1/14	\$	809	\$	80,400	\$	640	\$	80,569	\$	105,268	Investor Tax Credit
14	9/1/14	\$	809	\$	-	\$	363	\$	446	\$	104,822	
15	10/1/14	\$	809	\$	-	\$	349	\$	460	\$	104,363	
16	11/1/14	\$	809	\$	-	\$	359	\$	449	\$	103,913	
17	12/1/14	\$	809	\$	20,190	\$	346	\$	20,653	\$	83,261	MN-Made Payment
18	1/1/15	\$	809	\$	-	\$	287	\$	522	\$	82,738	
19	2/1/15	\$	809	\$	-	\$	285	\$	524	\$	82,214	
20	3/1/15	\$	809	\$	-	\$	256	\$	553	\$	81,661	
1		:		:		:	-	:		:		
47	6/1/17	\$	809	\$	-	\$	87	\$	722	\$	24,581	
48	7/1/17	\$	809	\$	-	\$	82	\$	727	\$	23,854	
49	8/1/17	\$	809	\$	-	\$	82	\$	727	\$	23,127	
50	9/1/17	\$	809	\$	-	\$	80	\$	729	\$	22,398	
51	10/1/17	\$	809	\$	-	\$	75	\$	734	\$	21,664	
52	11/1/17	\$	809	\$	-	\$	75	\$	734	\$	20,930	
53	12/1/17	\$	809	\$	20,190	\$	70	\$	20,929	\$	0	MN-Made Payment

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47	C /1 /17	à	800	÷		÷	07	÷	700	÷	24 591	
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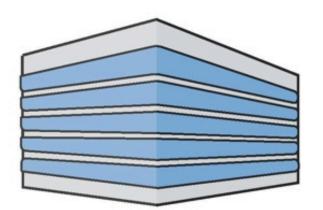
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53	12/1/17	\$	809	\$	20,190	\$	70	\$	20,929	\$	0	MN-Made Payment

SolarNote™ v2.0:

40kW Solar for Profitable Business

2014



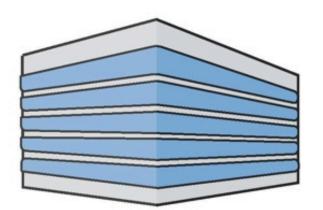
TOTAL COST:	\$127,577							
Investor Tax Credit	38,273							
Made in Minnesota Incentive	70,175							
Owner Contribution	0*							
120 Monthly Payments	\$1,335							
CUMULATIVE COST:	\$18,06 <u>5</u>							
Break-even within 7 years								
ANNUAL SOLAR PRODUCTION								
AFTER Year 10	\$ 4,887							
25 Year NPV:	\$71,198							



SolarNote™ v2.0:

40kW Solar for Profitable Business

2014

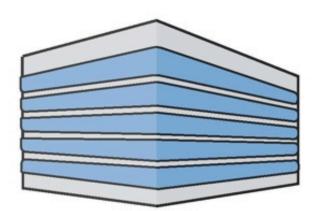


TOTAL COST:	\$127,577
Investor Tax Credit	38,273
Made in Minnesota Incentive	70,175
Owner Contribution	0
120 Monthly Payments	\$1,335
CUMULATIVE COST:	\$18,065
Break-even within 7 years	
ANNUAL SOLAR PRODUCT	ION
AFTER Year 10	\$ 4,887
25 Year NPV:	\$71,198
	eutectics

SolarNote[™] v2.0:

40kW Solar for Profitable Business

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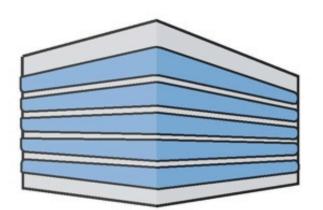


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ANNUAL SOLAR PRODUCT	ΙΟΝ
AFTER Year 10	\$ 4,887
25 Year NPV:	\$ 71,198
	eutectics

SolarNote™ v1.0:

40kW Solar for Car Dealership

2012



TOTAL COST:	\$263,340
Investor Tax Credit	79,002
SolarRewards Rebate	59,850
Made in Minnesota Incentive	19,631
Owner Contribution	0
53 Monthly Payments	\$809
CUMULATIVE COST:	\$18,065
Break-even within 7 years	
ANNUAL SOLAR PRODUC	CTION
AFTER Year 7	\$ 3,920
25 Year NPV:	\$ 34,378
	eutectics

Conventional financing for solar:

- Easy Access.
- Streamlined Process.
- Greater Value.





consulting LLC

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