



West Shore School District
Solar Project
March 9, 2023



Solar Overview

How it Works

Typically, District Partners with McClure through a Power Purchase Agreement (PPA) and finances the balance of the construction cost

McClure Company leverages its corporate tax liability to own/operate/maintain the system for a minimum of 5 years to maximize savings opportunities:

- Investment Tax Credit (30%)
- Federal and State Depreciation
- Utility Act 129 Rebates

After 5 years, the District can purchase the system at Fair Market Value or proceed with McClure owning and operating the system up to 30 Years (life of panel)

- 20- to 30- Year PPA Terms Common
- Hands off Operation for District

Net Annual Dollar Savings to District – no Upfront Capital Needed for Project

Opportunity To Combine With

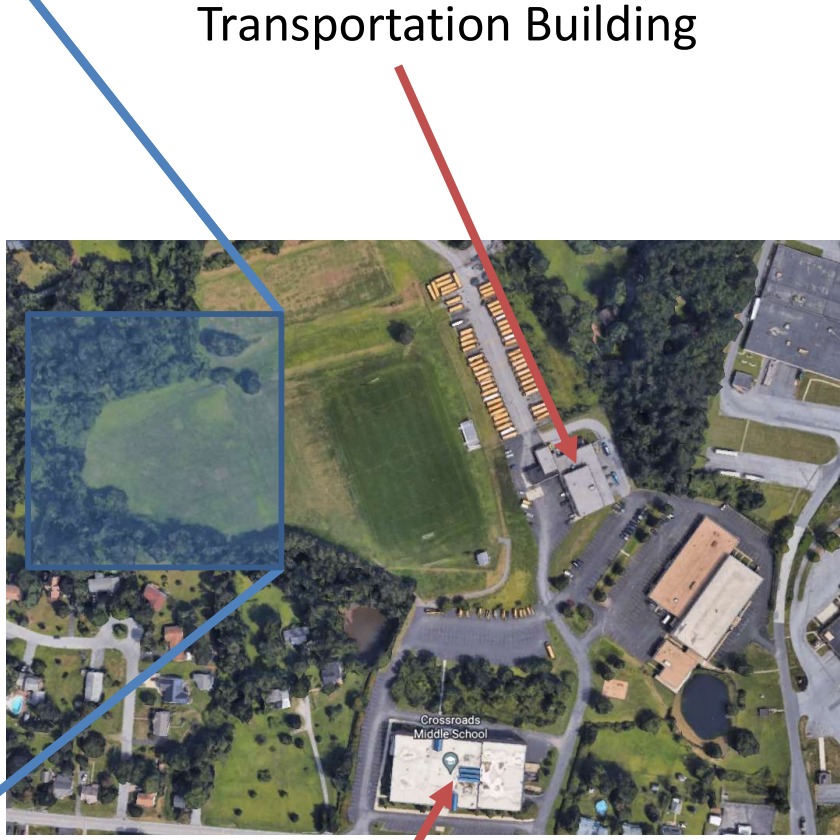
- Facility Needs To Maximize Savings And Right Sizing Solar Field
- Peak Curtailment Monitoring



Case Study: Steelton-Highspire School District

- 2.5-Megawatt Solar PV System
- 100% Production of District Energy
- Annual Payments: \$200,000 for first 10 years, approx. \$60,000 for remaining 5 = \$2.3M over 15 years
- 20-Year Net Savings: \$2,950,423
- Included Preventative Maintenance and LED Lighting Upgrades

Solar Project Overview



Transportation Building

Crossroads Middle School

PPA Term:	30 Years	O&M:	Included	System Size:	1,880 kW
PPA Price:	\$0.095-0.101/KWH	Inverter Replacement:	Year 15	Generation:	2,478,000 kwh
PPA Escalator:	2%	Lease Rate:	\$240k-250k Year 1	PPA Cumulative Savings:	\$1.4-1.5M



PPA Cashflow

30-Year PPA Cash Flow

Column 1: 30 Year PPA, \$0 down

Column 2: Generation of approximately 65% of Crossroads, Administration/ Transportation, and Red Land's Annual Electricity Usage with 0.5% annual system degradation

Column 3: Existing Electric Saving with a 3% annual escalation (utilizing historical bill escalations of the District)

Column 4: 30-Year Fixed PPA fee, including annual solar maintenance and inverter replacement by year 15. Fee also includes savings from PPL Act 129 rebate, Tax Credits, Accelerated Depreciation, Solar Renewable Energy Credits (SRECs), and Generated Electricity

Column 5: Annual Net Savings to District.

Column 6: Cumulative Savings to District resulting over 30 Years

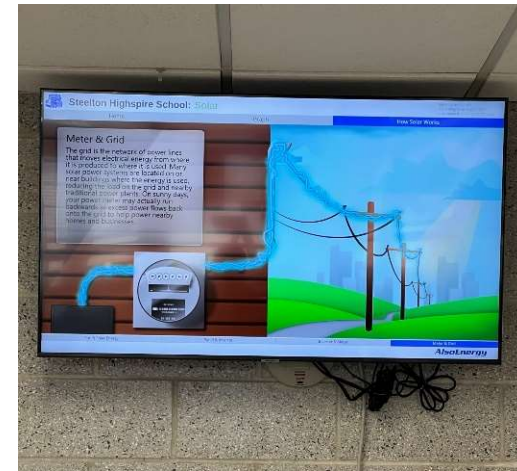
Year	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
		Annual Net Generation	Electricity Cost	Total Annual Cost	Annual Net Customer Savings	
		(KWH)	(\$)	(\$)	Savings (\$)	Cumulative (\$)
1		2,478,000	\$245,991	\$245,042	\$949	\$949
2		2,465,610	\$252,104	\$248,920	\$3,184	\$4,133
3		2,453,282	\$258,369	\$252,863	\$5,506	\$9,640
4		2,441,016	\$264,789	\$256,871	\$7,918	\$17,557
5		2,428,810	\$271,369	\$260,947	\$10,422	\$27,980
6		2,416,666	\$278,113	\$265,091	\$13,022	\$41,002
7		2,404,583	\$285,024	\$269,304	\$15,720	\$56,722
8		2,392,560	\$292,107	\$273,587	\$18,519	\$75,241
9		2,380,597	\$299,366	\$277,943	\$21,422	\$96,664
10		2,368,694	\$306,805	\$282,372	\$24,432	\$121,096
11		2,356,851	\$314,429	\$286,876	\$27,553	\$148,649
12		2,345,067	\$322,242	\$291,456	\$30,787	\$179,436
13		2,333,341	\$330,250	\$296,113	\$34,137	\$213,573
14		2,321,675	\$338,457	\$300,849	\$37,608	\$251,182
15		2,310,066	\$346,867	\$305,665	\$41,203	\$292,384
16		2,298,516	\$355,487	\$310,563	\$44,925	\$337,309
17		2,287,023	\$364,321	\$315,544	\$48,777	\$386,086
18		2,275,588	\$373,374	\$320,610	\$52,765	\$438,851
19		2,264,210	\$382,653	\$325,762	\$56,890	\$495,741
20		2,252,889	\$392,162	\$331,003	\$61,159	\$556,900
21		2,241,625	\$401,907	\$336,333	\$65,574	\$622,474
22		2,230,417	\$411,894	\$341,754	\$70,140	\$692,614
23		2,219,265	\$422,130	\$347,269	\$74,861	\$767,475
24		2,208,168	\$432,620	\$352,879	\$79,741	\$847,216
25		2,197,127	\$443,370	\$358,585	\$84,786	\$932,001
26		2,186,142	\$454,388	\$364,389	\$89,999	\$1,022,000
27		2,175,211	\$465,680	\$370,294	\$95,386	\$1,117,386
28		2,164,335	\$477,252	\$376,301	\$100,951	\$1,218,336
29		2,153,513	\$489,112	\$382,413	\$106,699	\$1,325,035
30		2,142,746	\$501,266	\$388,630	\$112,636	\$1,437,671

Note: Inverter Replacement in Year 15

Educational Opportunities

Informational Kiosk

- McClure also proposes to install an interactive solar kiosk that will provide real-time production data.
- This information can be tied to curriculum, allowing the project to become a teaching opportunity to the student population it serves.



Sample Solar Kiosk



Sample Solar Generation Data

Additional Related Site Scopes

District Provided

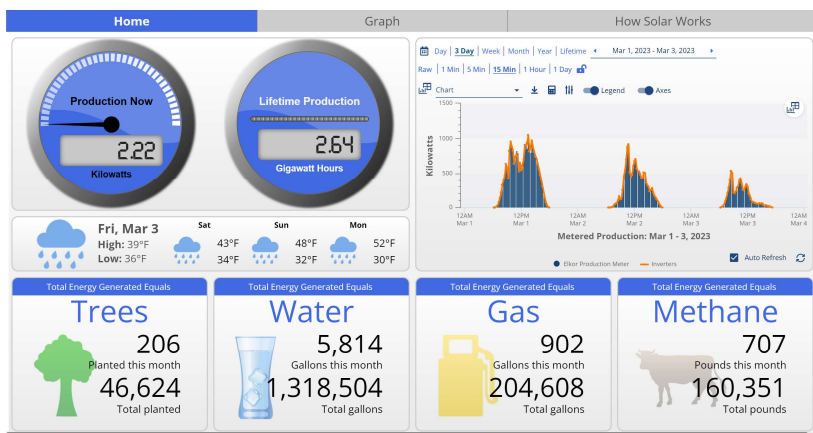
- Repair/Replace Failing Retaining Wall 
- Erosion Control/Repaired Fencing
Sedimentation Pond
- Site Upgrades at Adjacent Property
 - Demo of structures 
 - Capping/Disconnecting Utilities
 - Site Work for Recreation Space 
 - Access Improvements from
Crossroads Middle School 
- Maintain Nature Vegetation Barrier with
Neighbors



Additional Related Site Scopes

District Provided	Estimated Costs	Notes
Repair/Replace Failing Retaining Wall, Erosion Control & Sedimentation Pond	\$ 190,000	Removal of existing wall, regrading, new wall with reinforced concrete and proper drainage; repair apron and basin, remove obstructions from drainage field, regrade as necessary
Site Upgrades at Adjacent Property		
Demo of structures	\$ 115,000	Demolition of (2) structures including foundations and fill as needed
Capping/Disconnecting Utilities	\$ 10,000	Removal of septic systems and electric service and capping well
Site Work for Recreation Space	TBD	Minimal site work included above to level space and fill demolition, includes seeding
Access Improvements from Crossroads Middle School	TBD	
Maintain Nature Vegetation Barrier with Neighbors		Layout maintains approx 150' of natural barrier to neighboring properties

Solar References



McClure Most Recent K-12 Solar System Project Summary			
Project	Project Description	PPA Savings	Additional Incentives
East Lycoming School District	Year: 2011 Type: 600 kW Ground Mounted Solar Field	McClure/PPL	1) Commonwealth Financing Authority: \$1,000,000 Grant 2) PPL Electric Utility: \$1,400,000 3) American Recovery Investment Act: \$1,000,000
Elizabethtown Area School District	Year: 2019 Type: 500 kW Ground Mounted Solar Field	30% Investment Tax Credit and Accelerated Depreciation	1) Peak Load Curtailment Monitoring
Mifflin County School District	Year: 2022 (under construction) Type: 5,800 kW Ground Mounted Solar Field	26% Investment Tax Credit and Accelerated Depreciation	1) Combined with an HVAC renovation
Steelton-Highspire School District	Year: 2021 Type: 1,600 kW Ground Mounted Solar Field	26% Investment Tax Credit and Accelerated Depreciation	1) \$2M project cost that McClure 100% financed 2) Combined with a lighting and preventative maintenance project

Next Steps

Engineering Study (4-6 Weeks)

- Preliminary Layout and Design Documents
- Interconnection Application (Approval Timeline 52 weeks)
- Electrical Design
- Miscellaneous Surveys (Property, Deed, etc.)
- Results at April BOE Meeting

Not To Exceed \$40,000

Final PPA (1-2 Weeks)

- Final size, generation, and annual lease
- Utility Cost Savings
- PPA Contract
- Site Lease Contract
- Additional Scopes of Work Contract (ESCO Amendment)
- May BOE Meeting