

WARSAW COMMUNITY SCHOOLS

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Solar Power
Project 2018

April 2018

INSPIRATION AND BACKGROUND

- **STEM Education**
 - Data Center to show generation and usage statistics
- **Green Energy**
- **Financial Advantage**
 - Partnership with NIPSCO
- **What is the project?**
 - Solar arrays at six different buildings in WCS
 - LED Lighting retrofit at the same buildings

SCHOOL SITES

■ Edgewood Middle School

- Current Annual Use (kWh Consumed) – 877,712
- Future Solar Energy Produced (kWh) – 648,050
- Reduction in Energy Necessary based on LED Retrofit – 157,988
- Size of Array (kW) – 498
 - Number of Households this Array could Power – 55.39*
 - Number of Households offset by WCS Lower Consumption – 19.63
- Estimated Savings over 25 years \$2,002,848

**Using 2016 EIA data for Indiana, average household consumes 11,700 kWh/year.*

EDGEWOOD MIDDLE SCHOOL



SCHOOL SITES

■ Lakeview Middle School

- Current Annual Use (kWh Consumed) – 1,447,935
- Future Solar Energy Produced (kWh) – 1,070,691
- Reduction in Energy Necessary based on LED Retrofit – 217,190
- Size of Array (kW) – 828
 - Number of Households this Array could Power – 91.52*
 - Number of Households offset by WCS Lower Consumption – 32.25
- Estimated Savings over 25 years \$3,648,177

**Using 2016 EIA data for Indiana, average household consumes 11,700 kWh/year.*

LAKEVIEW MIDDLE SCHOOL



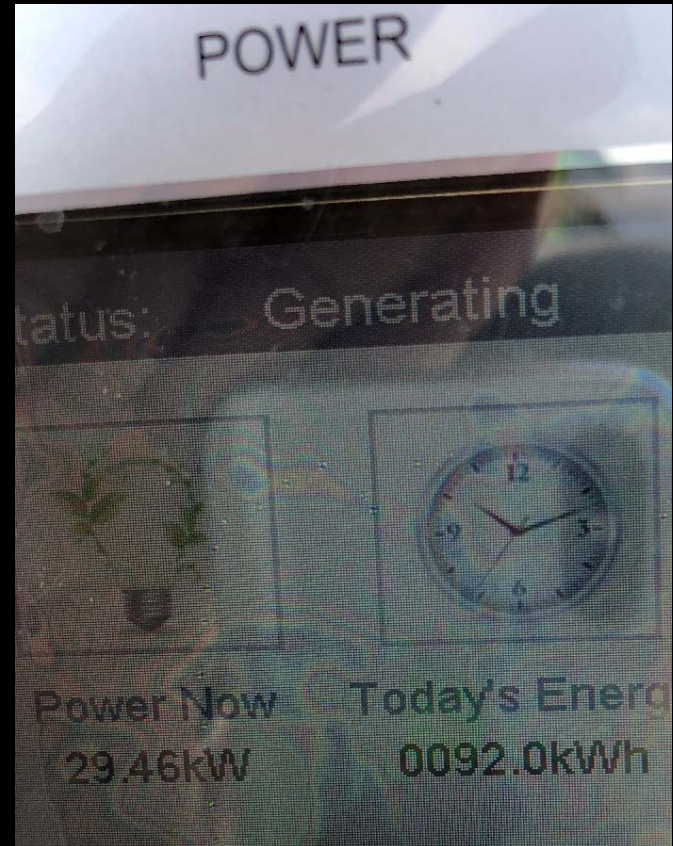
SCHOOL SITES

■ Harrison Elementary School

- Current Annual Use (kWh Consumed) – 816,925
- Future Solar Energy Produced (kWh) – 596,813
- Reduction in Energy Necessary based on LED Retrofit – 147,047
- Size of Array (kW) – 432
 - Number of Households this Array could Power – 51.01*
 - Number of Households offset by WCS Lower Consumption – 18.82
- Estimated Savings over 25 years \$2,283,646

**Using 2016 EIA data for Indiana, average household consumes 11,700 kWh/year.*

HARRISON ELEMENTARY SCHOOL



SCHOOL SITES

■ Eisenhower Elementary School

- Current Annual Use (kWh Consumed) – 605,568
- Future Solar Energy Produced (kWh) – 454,383
- Reduction in Energy Necessary based on LED Retrofit – 109,002
- Size of Array (kW) – 288
 - Number of Households this Array could Power – 38.84*
 - Number of Households offset by WCS Lower Consumption – 12.93
- Estimated Savings over 25 years \$2,755,949

**Using 2016 EIA data for Indiana, average household consumes 11,700 kWh/year.*

EISENHOWER ELEMENTARY SCHOOL



SCHOOL SITES

■ Leesburg Elementary School

- Current Annual Use (kWh Consumed) – 1,319,040
- Future Solar Energy Produced (kWh) – 981,540
- Reduction in Energy Necessary based on LED Retrofit – 237,427
- Size of Array (kW) – 500
 - Number of Households this Array could Power – 83.90 (Using 2016 EIA data for Indiana, average household consumes 11,700 kWh/year)
 - Number of Households offset by WCS Lower Consumption – 28.85
- Estimated Savings over 25 years \$3,500,950

**Using 2016 EIA data for Indiana, average household consumes 11,700 kWh/year.*

LEESBURG ELEMENTARY SCHOOL



SCHOOL SITES

■ WCS Central Office

- Current Annual Use (kWh Consumed) – 486,840
- Future Solar Energy Produced (kWh) – 338,113
- Reduction in Energy Necessary based on LED Retrofit – 87,631
- Size of Array (kW) – 260
 - Number of Households this Array could Power – 28.90*
 - Number of Households offset by WCS Lower Consumption – 12.72
- Estimated Savings over 25 years \$979,878

**Using 2016 EIA data for Indiana, average household consumes 11,700 kWh/year.*

TOTAL FOR ENTIRE PROJECT

■ Entire Project

- Current Annual Use (kWh Consumed) – 5,554,020
- Future Solar Energy Produced (kWh) – 4,089,590
- Reduction in Energy Necessary based on LED Retrofit – 956,285
- Size of Array (kW) – 2806
 - Number of Households this Array could Power – 349.56*
 - Number of Households offset by WCS Lower Consumption – 125.2
- Estimated Savings over 25 years \$15,171,448

**Using 2016 EIA data for Indiana, average household consumes 11,700 kWh/year.*

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