



**Ramapo Indian Hills Regional High School District**  
***Energy Savings Improvement Program (ESIP) Project***  
***October 17<sup>th</sup>, 2022***





**ENERGY SAVINGS  
IMPROVEMENT PROGRAM (ESIP)  
OVERVIEW**

**RIHRHSD ESIP PRIORITIES**

**PROJECT SCHEDULE**


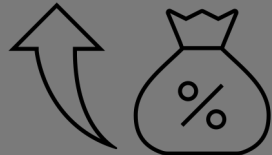



# What is the Energy Savings Improvement Program (ESIP)?

ESIP is a **financing mechanism** that allows school districts to make capital improvements to their facilities in a budget neutral method.



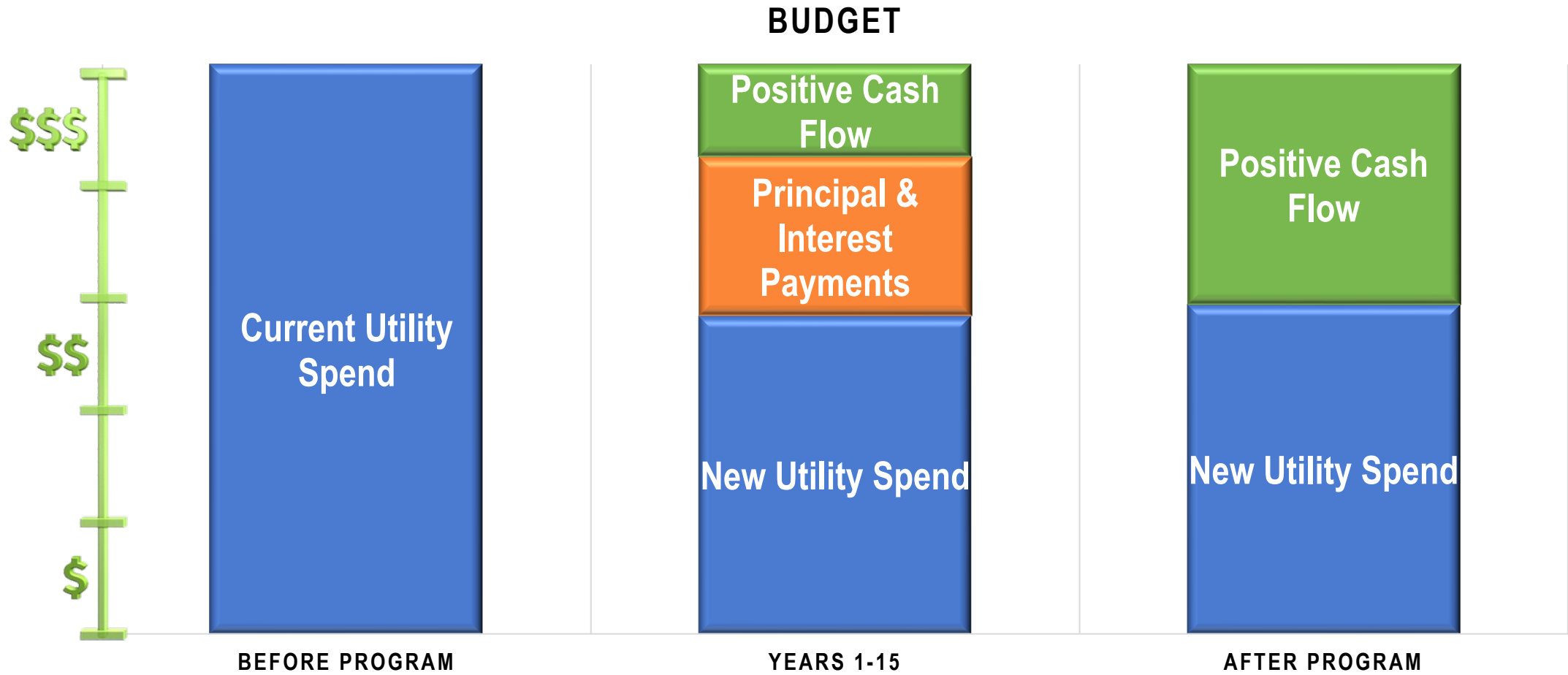
# Options for Funding Capital Improvements

<b>BOND REFERENDUM</b>	TAXPAYER IMPACT	
<b>LEASE PURCHASE</b>	TAXPAYER IMPACT	
<b>ESIP</b>	NO TAXPAYER IMPACT	

**\*\*ESIP is funded through Energy Savings\*\***



# RIHRHSD ESIP Budget



## CLASSROOM AIR CONDITIONING

Why Temperature Control is Important



Top Priority  
117 Classrooms  
New HVAC System in each  
classroom

## SOLAR RENEWABLE ELECTRIC GENERATION



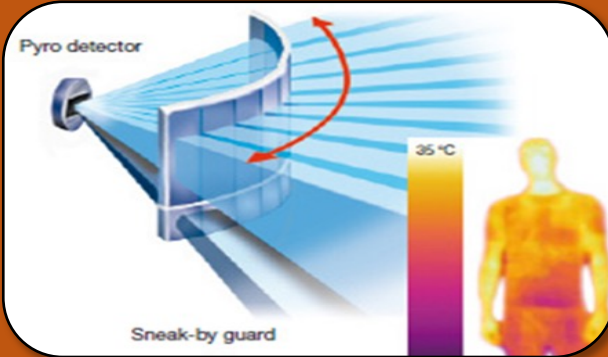
95% of Electric Consumption  
Generated On-Site  
\$.0449 per kWh  
Roofing Upgrades w/  
Warranty

## LED LIGHTING



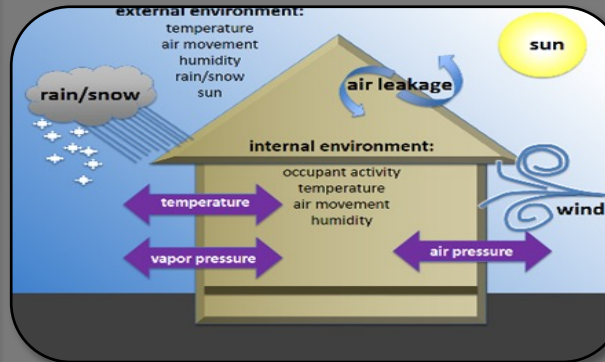
Entire District  
Code Compliant  
10 Year Warranty

## LIGHTING CONTROLS



Passive Infrared Occupancy  
Detection  
Reduce Lighting Run Hours

## BUILDING ENVELOPE



Reduce Infiltration  
Improved Comfort

## ENERGY MANAGEMENT SYSTEM



Entire District  
Open Protocol  
Humidity Monitoring  
Upgraded Platform



## ESIP Project Summary

	No Air Conditioning	Add Air Conditioning
Total Project Value	\$5,749,399	\$15,451,815
Amount Financed	\$5,749,399	\$4,886,865
Energy Savings	\$7,203,812	\$6,874,476
Total Rebates for RIHRHSD	\$838,000	\$838,000
Total Solar PPA Savings	\$2,788,728	\$2,980,828
Total Positive Cash	\$162,985	\$500,351





- **Approve Resolution to bid Solar PPA (Board Meeting)** 5/9/2022
- Client Kick-Off Meeting 5/12/2022
- Field Audits 5/12/22 – 7/25/2022
- Advertise Solar PPA Bid 6/9/2022
- Solicit for 3rd Party Engineering Firm 6/13 – 6/23/2022
- **Utility Baseline & ECM Verification Workshop** 6/17/2022
- **3rd Party Engineering Approval (Board Meeting)** 6/27/2022
- Solar PPA Bid Due 7/12/2022
- **Award Solar PPA (Board Meeting)** 7/25/2022
- **Solar PPA Contract Review** 8/1 – 11/15/2022
- **M&V Workshop and Scope Review** 8/24/2022
- **Engineered Solutions Peer Review** 9/30 – 10/7/2022
- **Client Charrette** 10/14/2022
- **Board of Education Presentation** 10/17/2022
- **Authorize Financing (Board Meeting)** 10/17/2022
- 3rd Party Engineering Review of ESP (Whitman Engineering) 10/19 – 11/4/2022
- Solicit Financing Rates for Lease Purchase 10/25 - 11/22/2022
- Submit ESP to BPU for Review 11/7 - 11/23/2022
- **Award Financing (Board Meeting)** 11/28/2022
- **Approve Implementation Contract (Board Meeting)** 11/28/2022
- **Acceptance of Final and BPU Approved ESP (Board Meeting)** 11/28/2022
- Close on Financing 12/15/2022
- Design ECMs/Implementation January 2023



# Upcoming Board Involvement

Authorize Financing – **October 17<sup>th</sup>**



Finance/Facilities Committee Meeting - **November**



Award Lease Purchase Financing – **November 28<sup>th</sup>**



Approve Implementation Contract with DCO Energy – **November 28<sup>th</sup>**



Acceptance of Final BPU Approved ESP – **November 28<sup>th</sup>**





*THANK YOU.*

**QUESTIONS?**

