



# Young Energy Pros

Jim White, P.E.

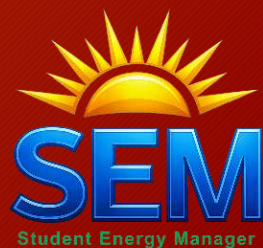
Public Utility District No. 1 of Chelan County



# Who are the Young Energy Pros?

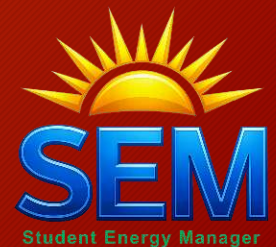
Using measured and verified energy cost savings & utility incentives, students are paid \$20 per hour, working 15-to-20 hours per week to:

- Monitor & analyze monthly energy bills,
- Analyze 15-minute load profile data,
- Identify no cost/low-cost energy saving opportunities,
- Learn valuable job skills, and
- Help businesses succeed.



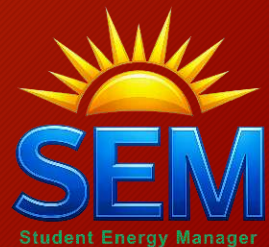
# Why high school students?

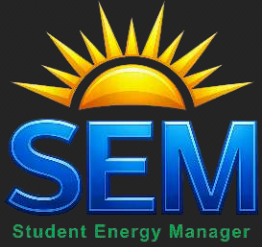
- Life-changing opportunity for the students,
- People want to help the students succeed,
- They are capable of learning the necessary job skills, and
- They are yearning to make a positive difference in the world.



# Students are trained to:

- Conduct after-hour “treasure hunts” with businesses to identify no-cost/low-cost energy saving opportunities,
- Navigate a building’s automated control system to find energy saving opportunities,
- Analyze 15-minute load profile data,
- Speak the language of energy efficiency, and
- Communicate their findings to others.





# NCW Educational Service District

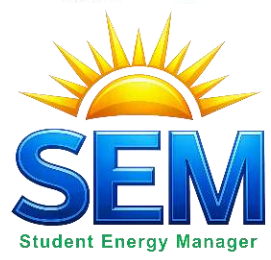
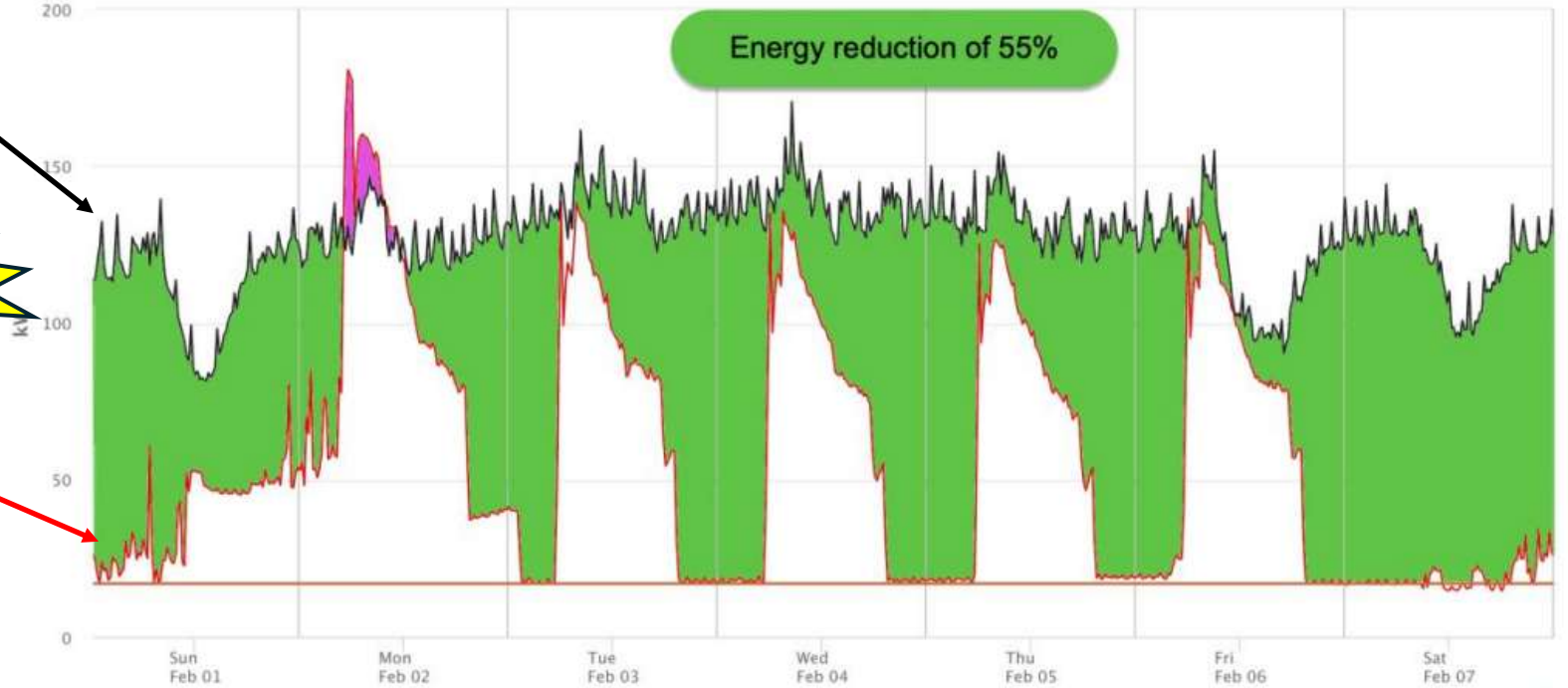


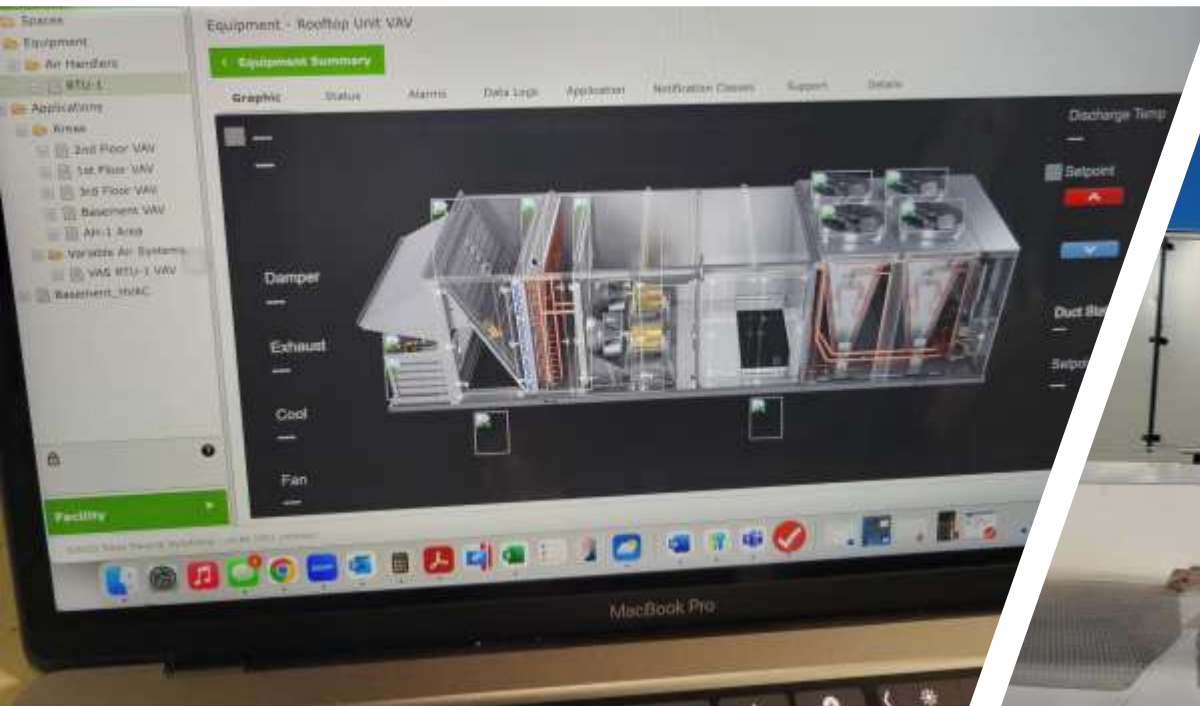
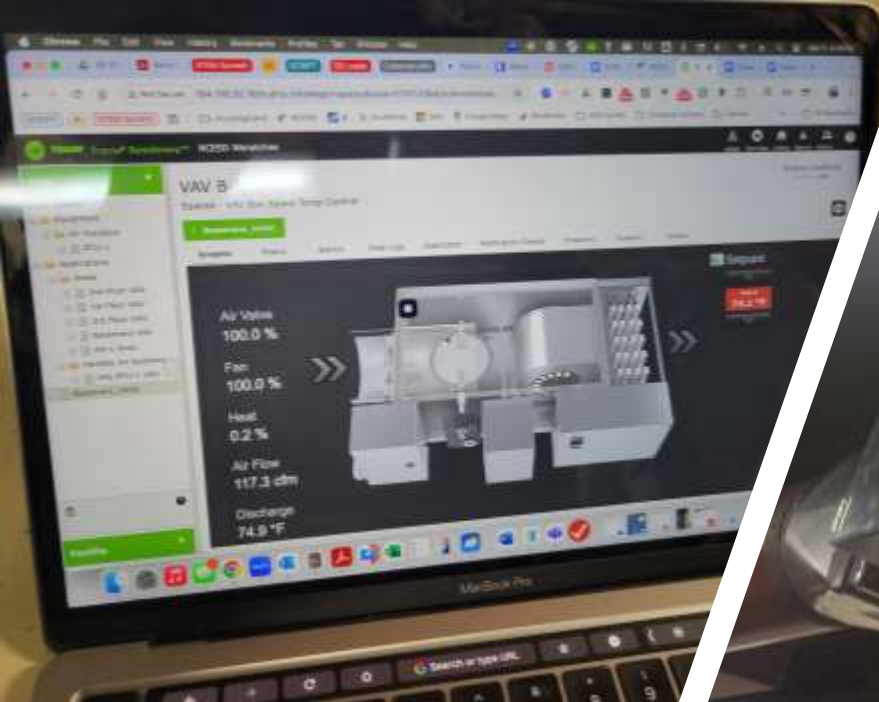


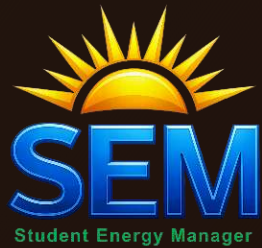
NCESD Office 171 (28,777 sqft)



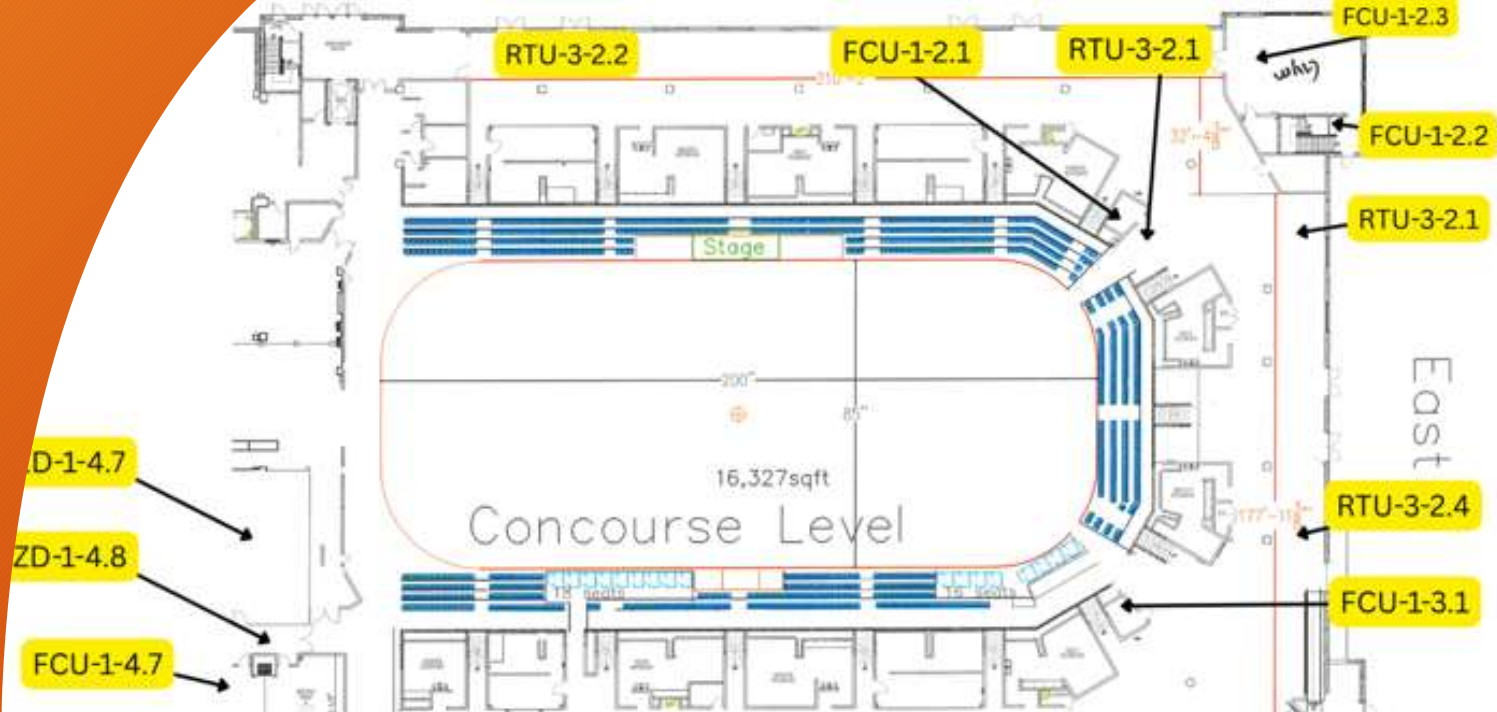
**Before Students**  
**wow**  
**After Students**





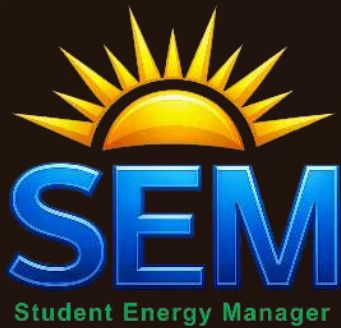


# Town Toyota Center



## Town Toyota Center - Equipment Inventory

Asset ID	Asset Name	Category	Location	Manufacturer	Model Num
	Compressor-1	Refrigeration	Chiller Room	Mycom	N6WB
	Compressor-2	Refrigeration	Chiller Room	Mycom	N6WB
	Compressor-3	Refrigeration	Chiller Room	MYCOM	N6WB
	Compressor Motor-3	Electrical	Chiller Room	NEMA	N/A
	Compressor Motor-1	Electrical	Chiller Room	WEG	10TOF4NXH
	Compressor Motor-2	Electrical	Chiller Room	WEG	10TOF4NXH
	Water Supply Motor Pump	Electrical	Chiller Room	NEMA	N/A
	Water Supply Motor Pump	Electrical	Chiller Room	NEMA	N/A
	BACKUP PUMP	Electrical	Chiller Room	TECO	LMPCLB0504
	ARENA PUMP	Electrical	Chiller Room	LANDMAEK	LMPCLB0504
	ARENA PUMP	Electrical	Chiller Room	WEG	N/A
	er Pump	Refrigeration	Chiller Room	ARMSTRONG	3x15x6 4280
	ump	Refrigeration	Chiller Room	ARMSTRONG	6x2x8 4280
		HVAC	Outside	Baltimore Aircoil Company	CXV-210
		HVAC	Chiller Room	CHIL-CON	FA-24252-11
		HVAC	Chiller Room	CHIL-CON	N/A

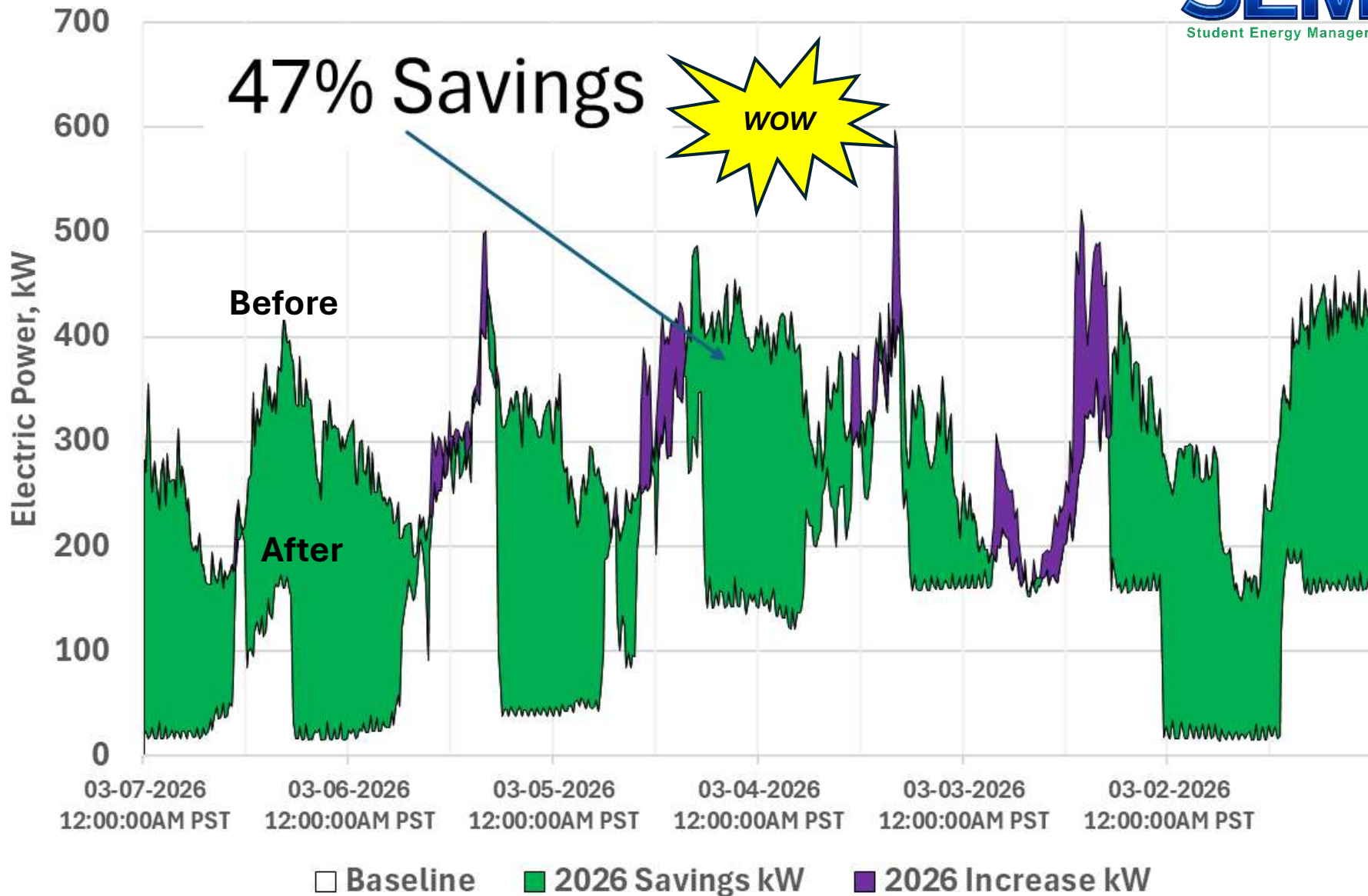


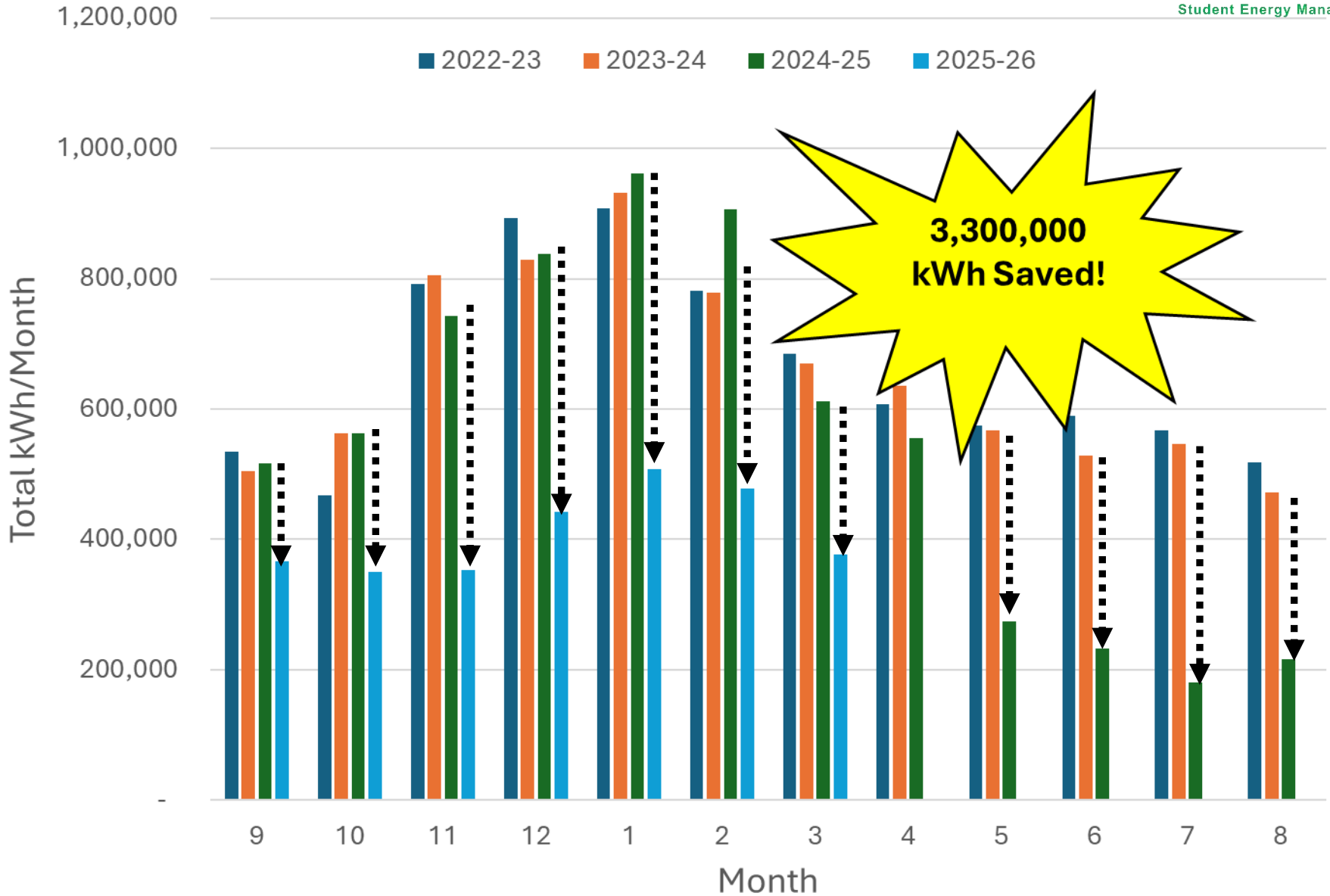
# TOWN TOYOTA CENTER





# Wenatchee High School



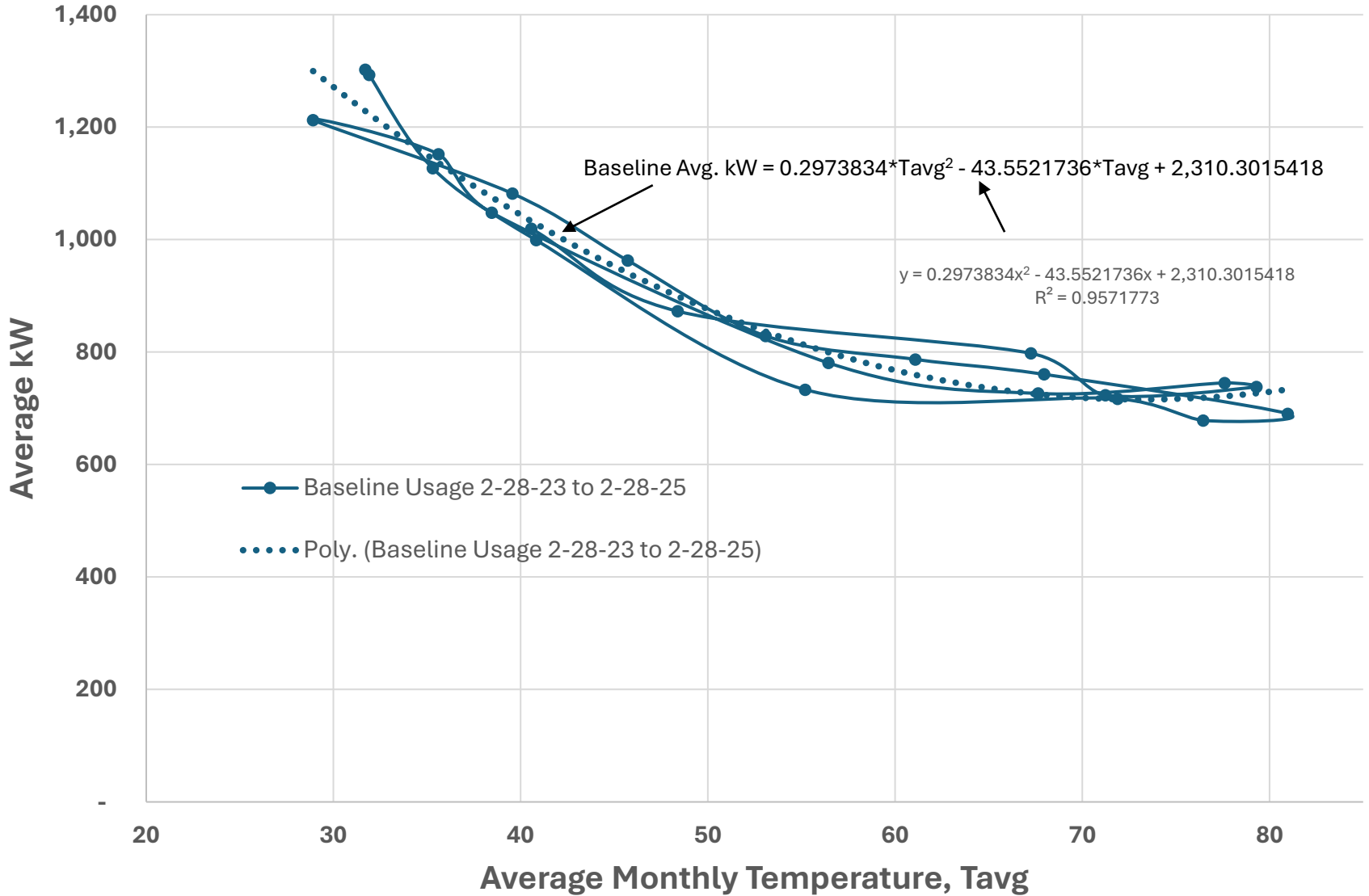


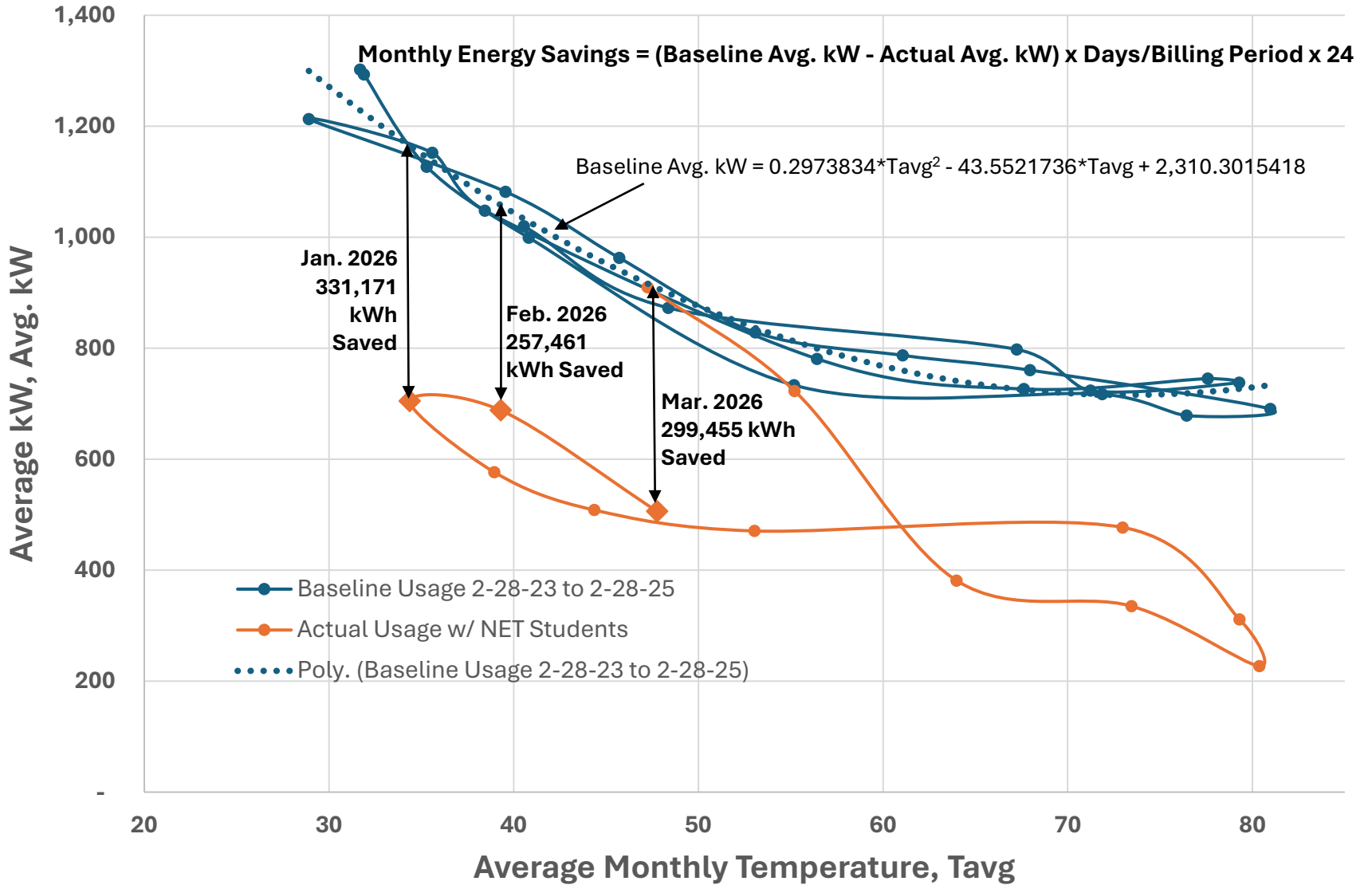
# Calculating Actual Energy Savings

## Using Monthly Billing Information

Start Date	End Date	Average Temp	Days	KWH	Average kW (kWh per Hour)
2/27/2026	3/30/2026	47.8	31	376,308	506

$$\text{Average kW} = \frac{[\text{kWh/Month}]}{[\text{Days/Month}] \times 24 \text{ Hrs/Day}}$$





# Key Elements



**MARKET FOR  
COMMERCIAL  
ENERGY EFFICIENCY**



**15-MINUTE LOAD  
PROFILE DATA**



**QUALIFIED ENERGY  
MANAGEMENT FIRM**



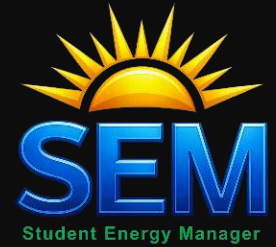
**TRAINED HIGH  
SCHOOL STUDENTS**



**ENGAGED SCHOOL  
DISTRICT**

# Key Participants

---



## Energy Management Firm

- Business Manager
- Energy Efficiency Expert
- Data Collection & Analyst
- Project Manager(s)

# Key Participants

## School District

- School District Superintendent
- Continuing Technical Education Director
- Maintenance and Operations Director

## Student Positions

(Sr. Mentors & Soph. Interns)

- Student Project Manager(s)
- Building Control Specialist(s)
- Communicator(s)
- Marketing
- Data Analyst

# Questions and Discussion

