# E.M.P

Energy Management Plan
Overview

## **Establish an Energy Team**

- Form a dedicated team: Include administrators, teachers, maintenance staff, and students.
- Appoint an Energy Manager: This person will oversee the implementation and progress of the plan.

## **Conduct an Energy Audit**

- Assess current energy usage: Identify areas where energy is being wasted.
- Benchmark performance: Compare your school's energy use with similar institutions.

## **Set Goals and Objectives**

- **Define clear, measurable goals**: For example, reduce energy consumption by 10% within the first year.
- Develop specific objectives: Such as upgrading lighting systems or improving insulation.

#### **Create an Action Plan**

- Lighting: Replace incandescent bulbs with energy-efficient LED lights.
- HVAC Systems: Upgrade to high-efficiency heating, ventilation, and air conditioning systems.
- **Schedules**: Control building systems with set back in off hours

#### **Implement Behavioral Changes**

- **Educate and engage**: Conduct workshops and campaigns to raise awareness about energy conservation.
- Involve students: Create energy-saving competitions and projects to encourage student participation

# **Monitor and Evaluate Progress**

- **Track energy usage**: Use energy management software to monitor consumption.
- **Regular reviews**: Hold quarterly meetings to review progress and make necessary adjustments.

#### **Recognize and Reward Achievements**

- **Celebrate successes**: Acknowledge the efforts of students and staff in achieving energy-saving goals.
- **Provide incentives**: Offer rewards for significant contributions to energy conservation.

#### **Continuous Improvement**

- **Update the plan**: Regularly revise the energy management plan based on new technologies and feedback.
- **Stay informed**: Keep up with the latest energy-saving practices and technologies.

#### Current EUI

Building EUI			
Building Name	Lakewood High School		
Enter Weather Normalized Site EUI	51	kBTU/SqFt	
Enter the building's EUI goal	44	kBTU/SqFt	
EUI reduction to meet goal	7	kBTU/SqFt	
Gross Floor Area	168,922	SqFt	
Annual Energy Use	8,615,022	kBTU/Year	

	Estimated Energy Consumption per Fuel				
	Assuming 100% Electric 2,524,9	919	kwh/yr		
ı	Assuming 100% Gas 86,1	150	therms/yr		

Annual Reduction Needed to Meet Goal				
Total Energy		1,182,454	kBTU/yr	14%
Fuel Reduction Scenarios				
	Electric	346,557	kwh/yr	14%
	OR Natural Gas	11,825	therms/yr	14%

#### After Planned Upgrades EUI

Building EUI			
Building Name	Lakewood High School		
Enter Weather Normalized Site EUI	48.6	kBTU/SqFt	
Enter the building's EUI goal	44	kBTU/SqFt	
EUI reduction to meet goal	4.6	kBTU/SqFt	
Gross Floor Area	168,922	SqFt	
Annual Energy Use	8,209,609	kBTU/Year	

Estimated Energy Consumption per Fuel			
Assuming 100% Electric	2,406,099	kwh/yr	
Assuming 100% Gas	82,096	therms/yr	

Annual Red	uction Needed to Meet C	Goal		
Total Energy		777,041	kBTU/yr	9%
Fuel Reduction	Scenarios			
	Electric	227,738	kwh/yr	9%
	OR Natural Gas	7,770	therms/yr	9%
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