



Carbon Neutral Goals & Guidelines

Board Meeting
September 21, 2023
Agenda Item No. 11.4

Presented by:
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When it comes to climate change, the cost of inaction is far greater than the cost of action

CORE VALUE

We recognize that our system is inequitable by design and we vigilantly work to confront and interrupt inequities that exist to level the playing field and provide opportunities for everyone to learn, grow and reach their greatness.

SCUSD GUIDING PRINCIPLE

All students are given an equal opportunity to graduate with the greatest number of postsecondary choices from the widest array of options

Acronyms

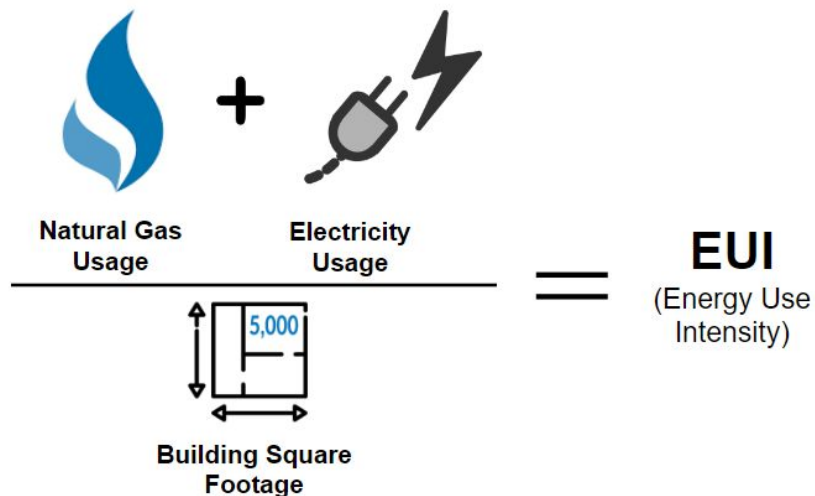
EUI	Energy Use Intensity, which refers to the amount of energy used per square foot annually
kBtu	Kilo British Thermal Units
SF	Square foot
GHG	Greenhouse Gas
IPCC	Intergovernmental Panel of Climate Change
PV	Photovoltaic (Solar)

Agenda

- **Initial Process**
- **Goals and Guidelines**
- **Costs of Inaction**
- **Next Steps**
- **Q&A**

Initial Process

- Facilities Master Plan
- Districtwide Energy Audit in 2019
- New Building Institute + Sacramento Municipal Utilities District
 - Determine Energy Use Intensity (EUI) for each building (2018/19 data)
 - Create Carbon Neutral Goals & Guidelines



The Following Goals & Guidelines Pertain to:

- **Capital Projects**-Bond Projects
 - New Construction
 - Major Modernization
- **Facilities Projects**-Maintenance
 - Replacements
 - Retrofits

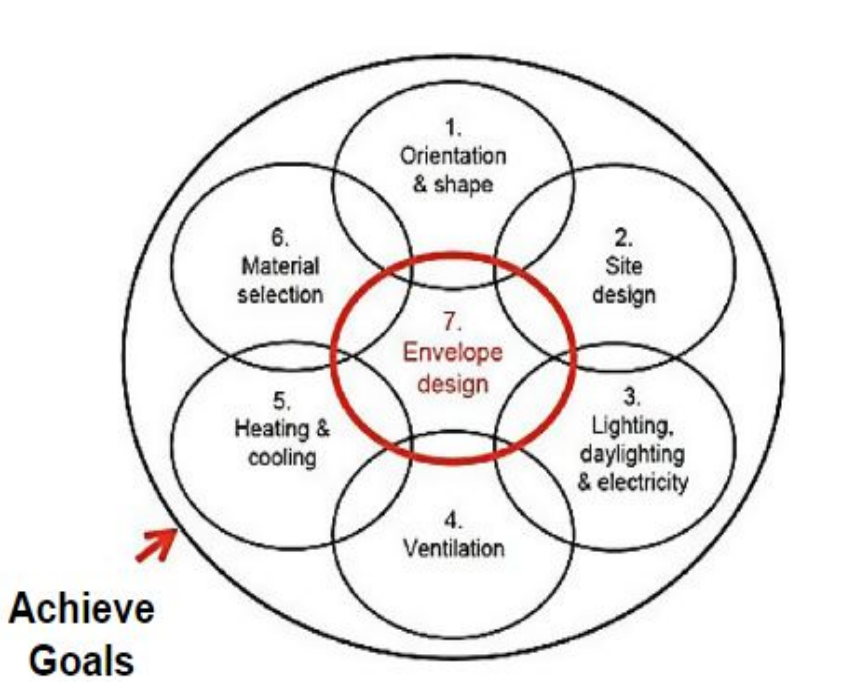


Goals & Guidelines

Portfolio Level Goals



Guidelines



Project Level Goals

1. All new construction projects will achieve a **site EUI of 19-21 kBtu/sf/year** before Solar
2. All major modernization projects will achieve a **site EUI of 25 kBTU/sf/year** before Solar
3. All school facility retrofits will **improve the site EUI by 20-50%** from a 2019 baseline and include a written plan for future removal of all gas-combusting equipment

Efficiency	Renewables	Electrification	Grid Harmonization	Embodied Carbon
<ul style="list-style-type: none">• LED lighting• Daylighting• Controls• Ventilation and HRV• Envelope• Equipment and plug load management	<ul style="list-style-type: none">• Rooftop solar• On-campus solar• Purchased credits or tariff from utility	<ul style="list-style-type: none">• Boiler replacement with heat pumps• Kitchen loads• Fleet electric Vehicles and charging	<ul style="list-style-type: none">• Battery storage• Grid integration• Load management	<ul style="list-style-type: none">• Concrete• Steel• Refrigerants• Other materials

Costs of Inaction

- **Financial**

- Carbon neutral schools are NOT more expensive
- Natural gas prices are volatile
- Utility bills come from the general fund

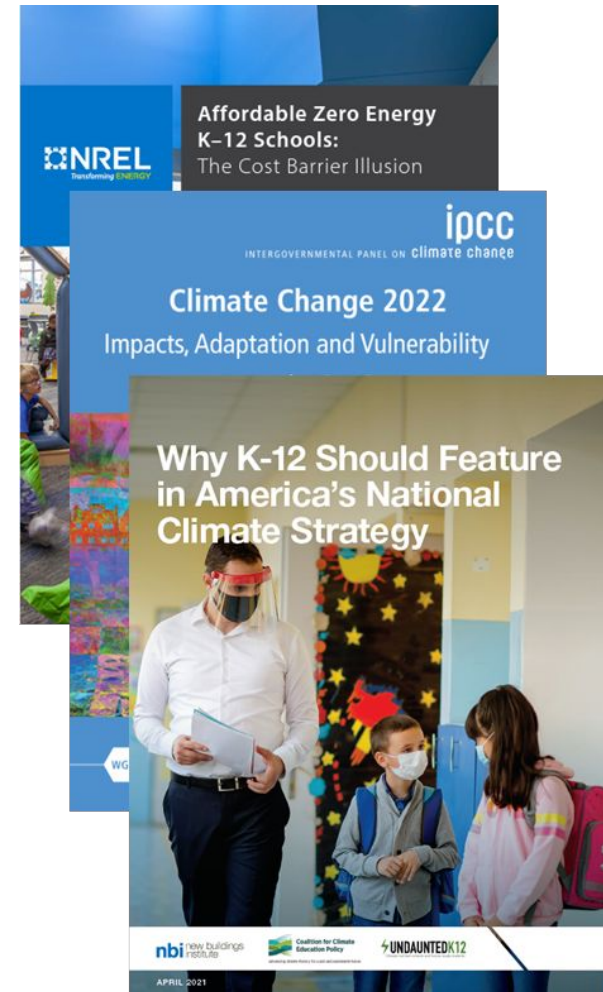
- **Environmental**

- Climate change is a threat to human well-being and planetary health (*very high confidence*)*
- There is a rapidly closing window of opportunity to secure a liveable and sustainable future for all (*very high confidence*)*
- The choices and actions implemented in this decade will have impacts now and for thousands of years (*high confidence*)*
- Buildings contribute 40% of global Greenhouse Gas Emissions

- **Social**

- Vulnerable communities who have historically contributed the least to current climate change are disproportionately affected (*high confidence*)*

* from the 2022 IPCC Report



Next Steps

- **Board Resolution**
- **Implementation of Goals & Guidelines**
 - Embed in Standards and Specifications
 - Training for Maintenance Staff