

Districtwide Plan for Sustainability

Santa Monica-Malibu Unified School District



Board Meeting
March 7, 2019

Team Introductions



Agenda

- Overview of the Plan Development Process
- Presentation of the Districtwide Sustainability Plan
- Discussion on Implementation of the Sustainability Plan

THE SUSTAINABILITY PLAN



Project Vision

The SMMUSD District-wide Sustainability Plan will lay out a roadmap for:

- **UNITING** SMMUSD's many existing sustainability initiatives;
- **INCORPORATING** sustainability into Education Services and all aspects of student learning; and
- **INTEGRATING** climate protection, resource efficiency, waste management, and other sustainability practices into District operations.

Intent of the Sustainability Plan

- Minimize the District's environmental impact
- Transition to a top-down management structure
- Institutionalize resources and programs Districtwide
- Make the District more resilient



Sustainability Plan Boundaries

- District Operational Control
 - Addresses what the District owns and operates



Plan Development Process

Three Phase Process – Community Driven & Collaborative Effort

- Phase 1: Engage (Feb. – May 2018)
- Phase 2: Assess and Create (May – Aug. 2018)
- Phase 3: Develop (Sep. – Feb. 2019)



Plan Development Considerations

- Community Input
- Research on Peers
 - Local school districts
- Local/Regional Context
 - Local cities, County, and State
- Industry Best Practice



Key Findings & Challenges



Sustainability Focus Areas



Climate



Education & Engagement



Energy Efficiency & Renewables



Water



Solid Waste



Transportation



Food, Nutrition & Wellness



Green Building & Operations

Sustainability Plan Elements

- **Baseline & Performance Metrics:** *Fiscal Year 2017-18*
- **Goals:** Ongoing, 2020, 2025, 2030
- **Current Initiatives**
- **Recommended Strategies**
- **Project Costs & Funding Mechanisms:**
 - Capital Costs
 - Cost Saving Potential
 - Grants

ENERGY EFFICIENCY + RENEWABLES

The generation of electricity and subsequent consumption of energy in buildings represents the single largest source of greenhouse gas emissions in the U.S. Acknowledging this reality, the District strives to minimize the environmental impacts of the District's energy needs through an integrated approach of energy conservation, efficiency measures, effective energy management, and the transition to clean, renewable energy systems. The District's energy program addresses all aspects of energy use within the District's facilities, including electricity, natural gas, and renewable energy systems, to identify opportunities for energy use and utility cost reductions and to increase the use of onsite, renewable energy. Additionally, the energy program strives to educate students and staff on the importance of energy efficiency and renewable energy while promoting behavior change and providing tangible actions they can take to help the District achieve their energy goals.

PERFORMANCE INDICATORS

METRICS

- Electrical Consumption**
Total kilowatt-hours of electricity consumed annually.
- Natural Gas Consumption**
Total therms of natural gas consumed annually.
- Energy Use Intensity**
Combined electricity and natural gas consumed in kItu per square foot.
- Onsite Solar Production**
Kilowatt-hours of electricity supplied annually by solar.
- Percent Onsite Solar Production**
Percent of total District electrical consumption supplied by onsite solar.

PROGRAM MISSION

Minimize the use of energy resources, convert to clean, renewable energy sources, and redirect financial resources towards student learning and sustainability initiatives.

GOALS

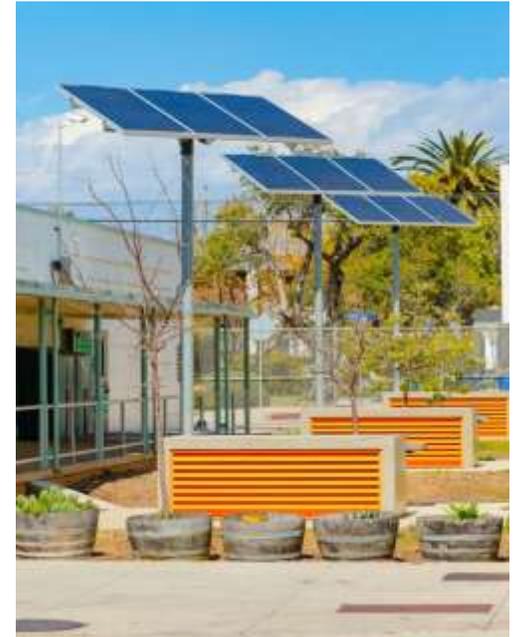
ONGOING	2020	2025	2030
<ul style="list-style-type: none">• Comply with all local, regional, state, and federal energy regulations.• Monitor and track performance monthly.• Promote student and staff participation in energy conservation behavior.	<ul style="list-style-type: none">• Reduce energy consumption by 20% compared to 2017-18 baseline.• Generate 20% of the District's electrical need from solar.• Transition all District sites to 100% renewable electricity through the Santa Monica and Malibu Clean Power Alliance.	<ul style="list-style-type: none">• Reduce energy consumption by 25% compared to 2017-18 baseline.• Generate 30% of the District's electrical need from solar.	<ul style="list-style-type: none">• Reduce energy consumption by 30% compared to 2017-18 baseline.• Generate 35% of the District's electrical need from solar.

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CLIMATE

Mission

Establish a baseline for the District's climate impacts and pursue climate neutrality by reducing greenhouse gas emissions, resource consumption, and pollution contributing to climate change.



CLIMATE GOALS

2020

- Complete a Districtwide GHG inventory of scopes 1, 2, and 3 emissions and adopt reduction goals for 2025 and 2030.
- Update the District's Disaster and Emergency Plans to include climate resiliency considerations.

2025

- Achieve the GHG reduction goals for 2025.
- Adopt a Districtwide Climate Action Plan.

2030

- Achieve the GHG reduction goals for 2030.

EDUCATION & ENGAGEMENT

Mission

To educate the next generation of environmental stewards, increase the environmental literacy of the District community, and inspire action to promote sustainability.



EDUCATION & ENGAGEMENT GOALS

ONGOING

- Provide professional development opportunities on sustainability concepts for educators.

2020

- Fully implement the Next Generation Science Standards Curriculum.
- Establish a baseline for existing efforts to integrate sustainability into lesson plans and classroom activities.
- Adopt Board Policy BP 6142.5 (a) – *Environmental Education*.
- Adopt a District policy, definition, and vision for sustainability literacy.
- Expand the Water Conservation Education Program to include 3rd grade and 4th grade.

2025

- Adopt a sustainability literacy goal and evaluation framework.
- Implement two additional co-curricular education programs on targeted sustainability topics.
- Each school to implement at least 3 extra-curricular sustainability programs per year.

2030

- Achieve the Year-5 sustainability literacy goal.

ENERGY EFFICIENCY & RENEWABLES

Mission

Minimize the use of energy resources, convert to clean, renewable energy sources, and redirect financial resources towards student learning.



ENERGY EFFICIENCY & RENEWABLES GOALS

ONGOING

- Comply with all local, regional, state, and federal energy regulations.
- Monitor and track performance monthly.
- Promote student and staff participation in energy conservation behavior.

2020

- Reduce energy consumption by 20% compared to 2017-18 baseline.
- Generate 20% of the District's electrical need from solar.
- Transition all District sites to 100% renewable electricity through the Santa Monica and Malibu Clean Power Alliance.

2025

- Reduce energy consumption by 25% compared to 2017-18 baseline.
- Generate 30% of the District's electrical need from solar.

2030

- Reduce energy consumption by 30% compared to 2017-18 baseline.
- Generate 35% of the District's electrical need from solar.

WATER

Mission

Preserve water resources for future generations and support regional water goals by implementing water conservation and efficiency measures, eliminating sources of water waste, and promoting the capture and infiltration of stormwater.



WATER GOALS

ONGOING

- Comply with all applicable stormwater regulations.
- Integrate low-impact development strategies beyond code requirements into all construction projects.

2020

- Achieve the required 20% reduction in water consumption compared to 2013 levels.

2025

- Reduce water consumption by 20% compared to the 2017-18 baseline.

2030

- Reduce water consumption by 30% compared to the 2017-18 baseline.

SOLID WASTE

Mission

Design an integrated waste management program that minimizes the generation of waste, encourages the recovery and diversion of reusable materials from the waste stream, improves efficiency in the utilization of natural and material resources, and protects the environment.



SOLID WASTE GOALS

ONGOING	2020	2025	2030
<ul style="list-style-type: none">• Comply with all local, regional, state, and federal solid waste regulations.• Recycle 100% of e-waste.• Exceed CalGreen C+D recycling requirements for all construction projects.	<ul style="list-style-type: none">• Reduce total waste generation by 5% compared to 2017-18 baseline.• Increase diversion from landfill to 45%• Eliminate single-use plastic water bottles Districtwide.	<ul style="list-style-type: none">• Reduce total waste generation by 10% compared to 2017-18 baseline.• Increase diversion from landfill to 60%	<ul style="list-style-type: none">• Reduce total waste generation by 20% compared to 2017-18 baseline.• Increase diversion from landfill to 85%

TRANSPORTATION

Mission

Convert to environmentally friendly vehicles and fuels, reduce single occupancy vehicle trips, and encourage sustainable transportation methods such as carpooling, walking, and biking that enhance mobility and decrease congestion.



TRANSPORTATION GOALS

ONGOING

- Offer Districtwide transportation demand management programs.

2020

- Conduct a GHG inventory of the District's fleet vehicle emissions and establish emission reduction targets.
- Reduce the drive alone commute rate by 5% compared to 2017-18 baseline.
- Achieve a Districtwide average AVR for staff of 1.35 or better.
- Establish a baseline for student commuting practices and develop AVR goals.

2025

- Achieve the Year-5 GHG emission reduction targets for the District's fleet vehicles.
- Reduce the drive alone commute rate by 10% compared to 2017-18 baseline.
- Achieve a Districtwide average AVR for staff of 1.55 or better.
- Achieve the Year-5 student commuting AVR goals.
- Provide a minimum of two EV chargers at each District site.

2030

- Achieve the Year-10 GHG emission reduction targets for the District's fleet vehicles.
- Reduce the drive alone commute rate by 15% compared to 2017-18 baseline.
- Achieve a Districtwide average AVR for staff of 1.75 or better.
- Achieve the Year-10 student commuting AVR goals.
- Provide a minimum of five EV chargers at each District site.

FOOD, NUTRITION & WELLNESS

Mission

Offer a healthy, nutritious, and environmentally sustainable Food Services program and promote student wellness by delivering nutrition and health education to all students.



FOOD, NUTRITION & WELLNESS GOALS

ONGOING

- Comply with Board Policy 3550 – *Food Service/Child Nutrition Program*

2020

- Adopt the Good Food Purchasing Program and develop procurement goals for 2, 5, and 10 years.
- Evaluate progress towards achieving the Student Wellness Policy Goals (BP E 5030) and develop an implementation plan.
- Develop a sustainable food and nutrition communications and marketing campaign.

2025

- Achieve the Year-5 Good Food Purchasing Program goals.
- Achieve all goals outlined in the Student Wellness Policy Goals (BP E 5030)
- Certify at least three school foodservice operations as sustainable dining operations.

2030

- Achieve the Year-10 Good Food Purchasing Program goals.
- Achieve zero waste in all District cafeterias.

GREEN BUILDINGS & OPERATIONS

Mission

Provide sustainable, healthy, and safe environments for the District community through the adoption of sustainable building design principals, construction methods, and operational practices that minimize environmental impact and maximize health.



GREEN BUILDINGS & OPERATIONS GOALS

2020

- All new buildings shall be designed to use ten percent (10%) less energy than the allowed energy budget established by the 2016 California Energy Code.
- All new buildings and major renovations to exceed the minimum CHPS Designed™ qualifying point count by 25%.
- Adopt a Sustainable Purchasing Policy and Environmentally Preferable Purchasing (EPP) guidelines and develop sustainable purchasing goals in key product and service categories.

2025

- Adopt CA Green Building Standards Chapter 11, Title 24 (CALGreen) Nonresidential Tier 2 Voluntary Measures as mandatory and incorporate into the District's Sustainability Design Guidelines.
- All new buildings and major renovations to achieve CHPS Verified™.
- All new buildings and major renovations to consider WELL Certification Silver.

2030

- All new buildings to be Zero Net Energy (ZNE); and 50% of existing buildings to be retrofitted to ZNE.
- All new buildings and major renovations to achieve CHPS Verified Leader™.

IMPLEMENTATION OF THE SUSTAINABILITY PLAN



Success Factors and Recommendations

- Leadership
- Program Management
- Monitoring and Reporting
- Communications
- Recommended Strategies



THANK YOU

